graphic arts monthly

THE MAGAZINE OF THE PRINTING

Web Offset
The Action Heats Up In Ever-Changing Field

Literacy Issue Returns.
Update on Technical

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VOLUME 62, NUMBER 5

graphic arts monthly

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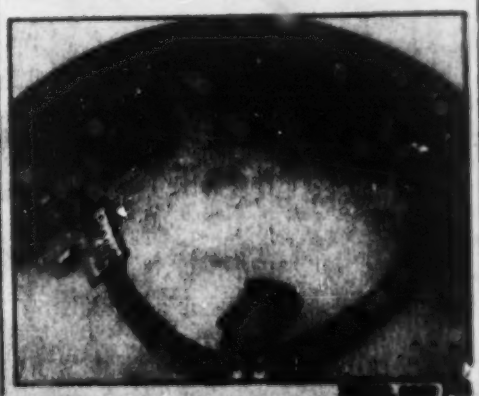

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Report Stable 1990 After Shaky Start

This U.S. economy squeaked out an inflation-adjusted 1.1% annualized growth in the fourth quarter of 1989, based on the final revisions from the Commerce Department. Cahners Economics anticipated a very weak fourth quarter showing, so the slow growth did not alter our outlook. Our GNP forecast for 1990 remains at 2.0% real growth. That's weaker growth than in 1989, but far from recession levels.

The economy has just passed through its worst period, and quarterly annualized growth will characterize this year. The transition period, or soft landing, discussed by many economists actually began around mid-1989 and will last until mid-1990.

With transition periods come mixed economic signals; thus, confusion and uncertainty have been the order of the day. This uncertainty is reflected in the Conference Board's Index of Consumer Confidence which, in January of this year, dipped to its lowest level since June of 1987. Fourth quarter estimates of consumer spending also reveal hesitancy. Although disposable income grew a relatively healthy 2.6% in the fourth quarter, consumer spending was virtually unchanged from the third quarter.

Nevertheless, Cahners Economics is betting that steady improvement, particularly in the second half of 1990, will be the course of economic activity for the remainder of the year. Real growth in disposable income, for example, is expected to be weakest in the first half of 1990. Income will grow 1.1% in the first quarter and 1.7% in the second, compared to 2.4% and 3.1% growth in the latter quarters.

Similarly, employment growth will turn upward in the latter half of the year. After growing by just 450,000 in the first half of the year, 1.0[illegible] million new jobs will be added to the economy in the second half of the year.

Although you may hear a few more disappointing economic numbers for the early part of 1990, expect mild, but positive, growth in disposable income, employment, consumer spending, and retail sales this year. This may add up to an overall lackluster year for 1990, but signs point to a brighter 1991. Stronger growth is just around the corner.

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In spite of some troubling inflation numbers in recent months, the economy is not headed for another inflationary spiral. The consumer price index increased just under 5% over the past 12 months; removing food and energy costs lowers that figure to 4.5%. Food and energy costs have been pushed up by temporary conditions, namely weather, and are likely to decline in the months ahead. In addition, producer prices are an indicator of future price hikes for consumer goods and they have moderated considerably. All of this should bring consumer prices down to the 4% range by the end of this year.

GENERAL ACTIVITY INDICATORS

				Annual Percentage Change		
General Economic Indicators	1988	1989	1990	1988	1989	1990
Gross National Product ($)	[illegible]	[illegible]	[illegible]	[illegible]	2.0	2.9
Consumer spending ($)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.6
Fixed investment ($)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Industrial Production (Index)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Housing Starts (M)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Consumer Price Index ($)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Nov 89	Dec 89	Jan 90	1988	1989	1990
Industrial Production						
Printing and Publishing	[illegible]	[illegible]	[illegible]	91	71	6.9
Newspapers	[illegible]	[illegible]	[illegible]	1.1	1.9	7.5
Periodicals, books, and	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Magazines	[illegible]	[illegible]	[illegible]	[illegible]	5.9	[illegible]
Industry Payroll (%)						
Newspaper industry employment	na	na	na	7.9	5.3	1.8
Other publishing industries	na	na	na	4.2	3.5	5.9

[illegible]

East South Central Region

This region is actually a pairing of two diverse, though kindred, regions. Kentucky and Tennessee, the northern tier, are among what have traditionally been called border states: above them is middle America, below them is the Deep South. The eastern portions of both states are part of the Appalachian Mountains; the western portions become flat plains sloping down toward the Mississippi River.

This transitional quality is reflected in their history during the Civil War (1861-1865). Kentucky remained in the Union and Tennessee did not. In general, however, and [illegible] the above exceptions, Kentucky and Tennessee are usually thought of as part of the South. There is no question about the other two states in the region, Alabama and Mississippi. They are as characteristically Southern as, say, New Jersey is characteristically Northeastern.

The South has been the center of some of the [illegible] [illegible] polarized feelings. Even people who have never been there have passionate opinions about Mississippi in a way they don't about, say, Idaho.

The South has, like New England, a strong regional identity. Some of the causes [illegible] and early 19th centuries [illegible]

[illegible]

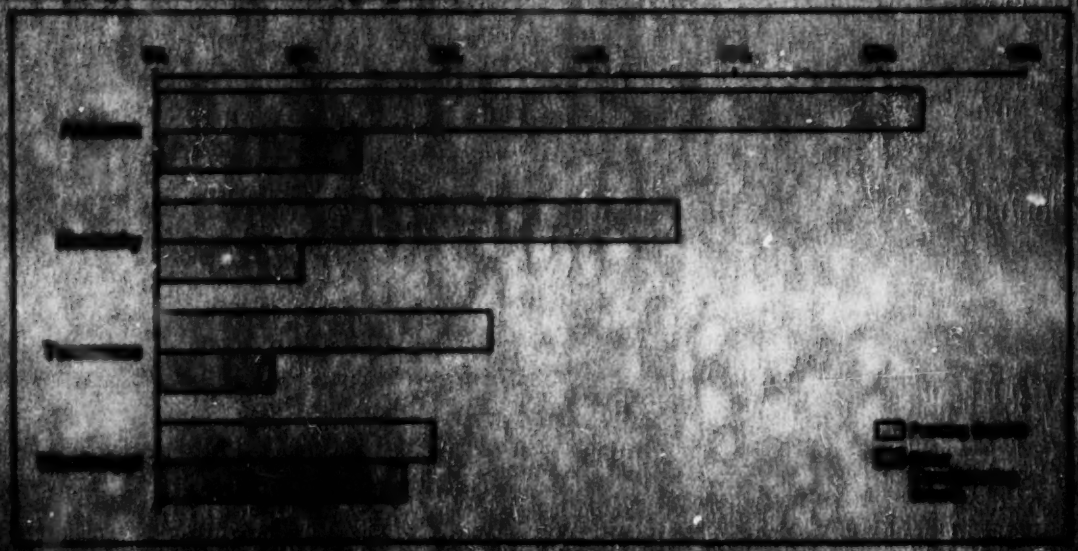
Economically, [illegible] Coal mining and agriculture [illegible] were the traditional mainstays of the East South Central region, and are still important, [illegible]

[illegible]

Data for this report come primarily from Printing Industries of America, the National Association of Printers and Lithographers, the U.S. Bureau of the Census, [illegible]

[illegible]

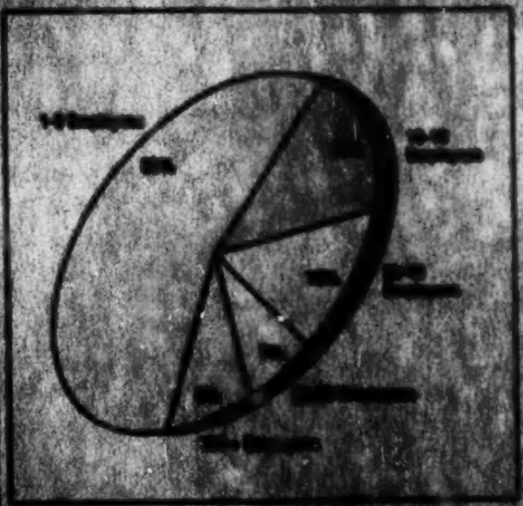
Commercial Printing

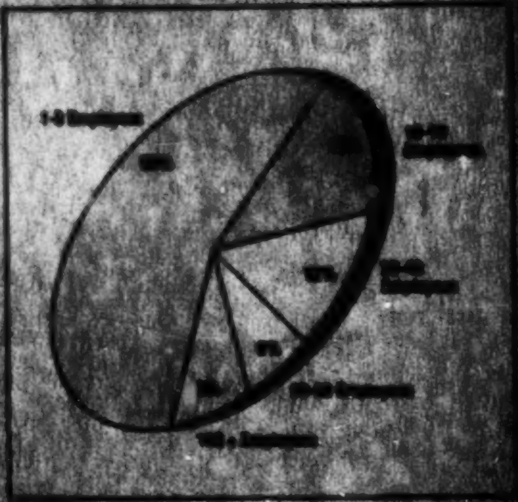


Regional Overview

Note that these figures, taken from the [illegible] data-base, reflect the universe of printers [illegible]

[illegible]





Overall, the East South Central region accounts for about [illegible] of the total U.S. [illegible] by value of [illegible]

[illegible]

[illegible]	[illegible]	[illegible]
[illegible]	110	[illegible]
[illegible]	1,500	[illegible]
[illegible]	220	[illegible]
[illegible]	815	[illegible]

Here we have a couple of [illegible]

[illegible]

Tables of leading printers/plants in order of overall market size. This will vary from region to region.

Company	Location	Sales
[illegible]	[illegible]	[illegible]

Company	Location	Sales
[illegible]	[illegible]	[illegible]

[illegible]

State	[illegible]	[illegible]	[illegible]
[illegible]	$ [illegible]	37	[illegible]
[illegible]	[illegible]	40	[illegible]
[illegible]	[illegible]	44	[illegible]
[illegible]	7,483	50	[illegible]
U.S. Average	[illegible]		[illegible]

[illegible]

Leading Printers in Major Markets

Demographics in East South Central

[illegible]

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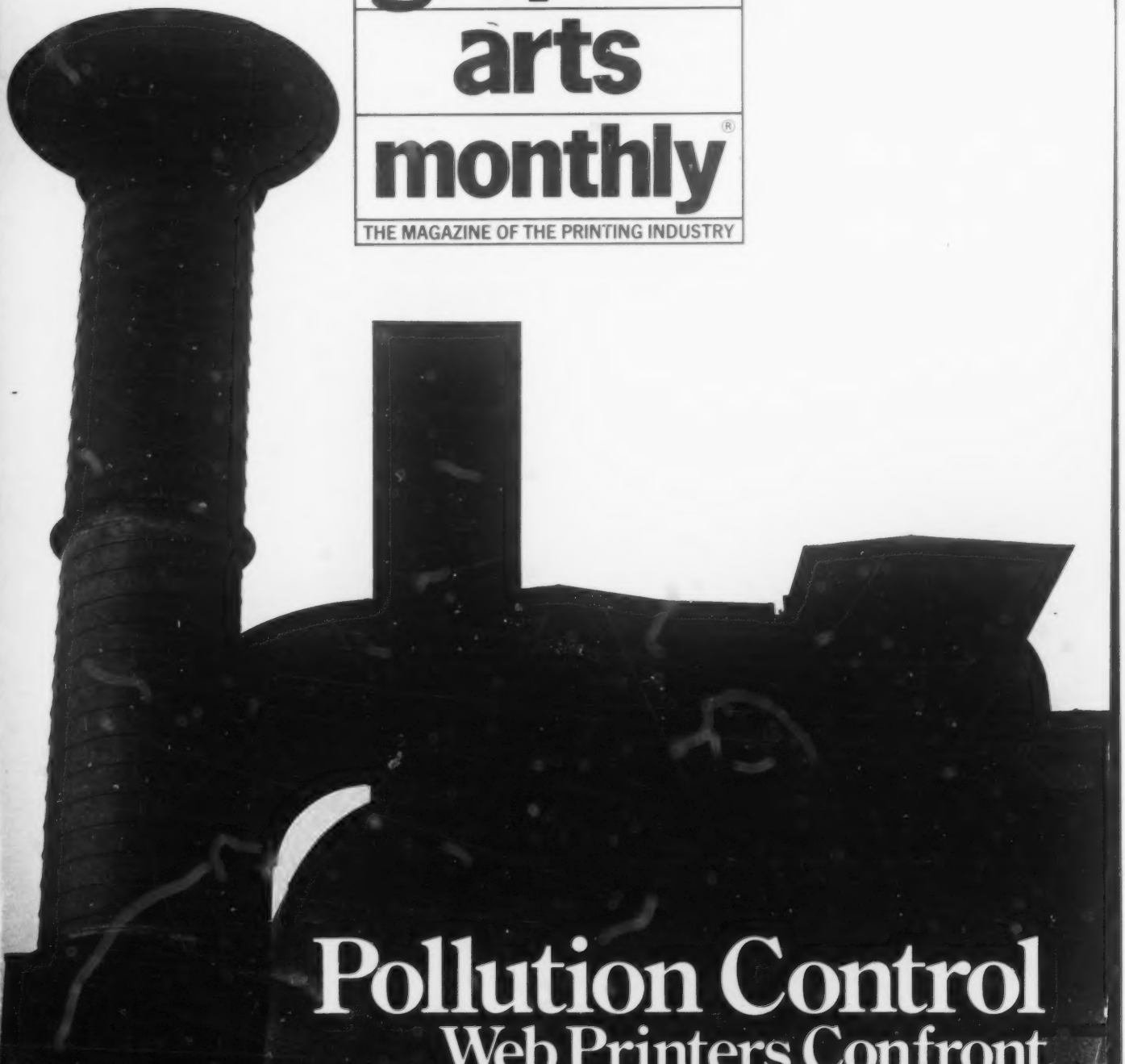

Pollution Control

Web Printers Confront Tighter Air-Emission Rules

Also: Drupa 90 Photos, Devon Group Expands

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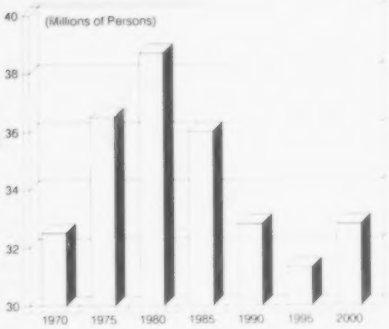
Entry-Level Worker Pool Will Shrink



The size of the entry-level workforce (people between the ages of 16 and 24) has been on a steady decline, making it more difficult for employers to find workers. From 1980 to 1989, the size of this age group fell 13.6% nationwide, to 33.4 million people.

This situation is likely to worsen before it improves. The number of people aged 16 to 24 years old will reach a low point in the mid-1990s before beginning on an upward track. The Bureau of Labor Statistics predicts the population of this age group will decline to 31.3 million by 1995, and reach 32.8 million by the year 2000.

In addition, further declines in availability of entry-level workers will come from the increasing percent of this population that will attend college, thus delaying their entrance into the workforce. The percent of this population enrolled in institutions of higher education increased from 20.3% in 1980 to 22.8% in 1988. These enrollment rates are expected to continue to increase, especially among women.

The actual size of the labor force is a combination of the size of the population and the labor force participation rate. Despite the increase in college enrollment rates, the labor force participation rate among 16-to-24 year-olds is on the rise and should reach 71.3% by the year 2000, up from 68.6% in 1989. Thus, the size of the youth labor force will decline at a slower pace than its total population.

The fastest growing groups, in terms of labor force participation, are women, racial minorities, and Hispanics. By the year 2000, 47% of the entire labor force will be female; racial minorities will account for 16% of the labor force. Less than one-half of the new workers entering the work force over the next 10 years will be traditional white male employees. As the labor force becomes increasingly female and non-white, employers will have to look toward these growing populations for new employees.

Our latest forecasts for paper transaction prices show further declines in 1990, especially in the newsprint and uncoated markets. Printers should continue to enjoy soft paper prices in 1991 as well. The high paper price increases of the past few years are reflected in the 4.5% increase in commercial printing's production price index for 1989. Based on lower costs of paper, this production price index is expected to rise a slower 3.5% by the end of this year, and a slight 2.1% in 1991.

PAPER TRANSACTION PRICES

				Annual % Change		
Paper Category ($/ton)	**Q1/89**	**Q4/89**	**Q1/90**	**1989**	**1990**	**1991**
Newsprint—30 lb., East	$ 585	$ 535	$ 520	-6.8	-7.2	0.9
Directory—uncoated groundwood, 22.5 lb., white	850	730	730	2.3	-7.9	4.4
Supercalendered—uncoated groundwood, 34 lb.	830	830	830	3.1	-1.3	3.2
Offset—uncoated groundwood	675	635	635	-0.8	-6.4	1.5
Offset—uncoated, white, 50 lb.	900	820	820	3.8	-8.9	-1.8
Coated—No. 1, 70 lb.	1600	1610	1610	6.8	-2.0	1.6
Coated—No. 3	1220	1250	1250	11.9	-0.4	1.6
Coated—No. 5, 34 lb. roto	1000	960	960	1.4	-6.3	-1.8
Bond—uncoated white, No. 1, 20 lb.	1100	1090	1090	2.8	-5.3	0.5
Bond—uncoated white, No. 4, 20 lb.	1000	973	950	14.5	-6.7	4.3

Source: Purchasing magazine's Transaction Pricing Service

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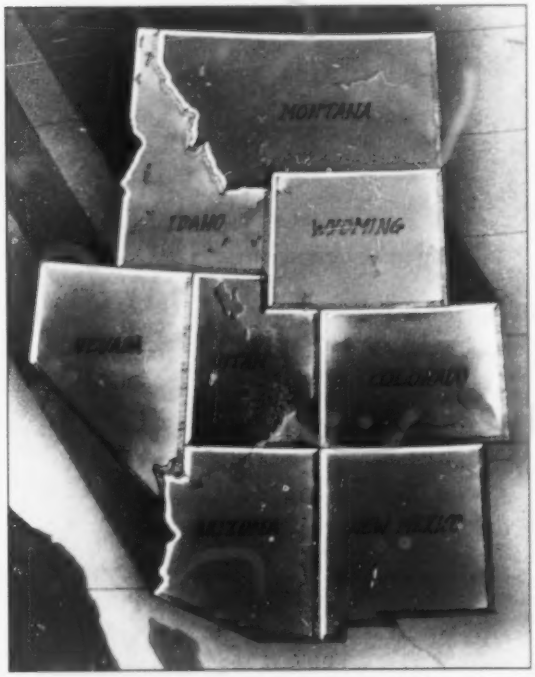
Mountain Region

The first thing you have to remember about the Mountain region is that it contains some of the most beautiful landscapes in the world.

The second thing you have to remember is that there aren't many people living in that landscape. At over 855,000 square miles, it constitutes 24% of the area of the United States. On the other hand, only 5.4% of the population lives there.

This often translates into a poor economy and/or industry, and with a few exceptions, that's true. In terms of per-capita income, it contains four of the *bottom* 10 states, for instance.



Jane Brownlow

The southern states—Arizona, New Mexico, Colorado, Utah, and Nevada—are reasonably prosperous. All of them have growing populations, and three of them have per-capita incomes either above or close to the national average. The exceptions are New Mexico and Utah, which, while not wealthy places, are showing some signs of economic health.

The upper-tier states—Montana, Wyoming, and Idaho—are another story. All three states are losing population—partly because of the weather, and the topography. Mountains are inspiring to look at, but they present certain problems if your aim is farming or building factories. In fact, the primary economic activities in these states have been (and mostly still are) mining, agriculture, and ranching. None of these are expanding.

The printing industry in the Mountain region, then, is pretty well concentrated in three states, Colorado, Arizona, and Utah. The least active states, Montana and Wyoming, between them represent about $100 million in printing sales, virtually all of it done by very small shops. Interestingly, the industry is growing like crazy everywhere in the region (well, except for Wyoming). The southern-tier states are enjoying a population boom, especially Arizona, and apparently it is triggering a burgeoning demand for printing.

This, combined with the region's demographics, makes it one of printing's healthier, if smaller, enclaves. The populace is well educated. Every state is ahead of the national average in terms of high-school graduates, and most of them lead in college grads as well. The region seems poised to do nicely on its own terms.

Data for this report come primarily from Printing Industries of America, the National Association of Printers and Lithographers, the U.S. Bureau of the Census, Trade and Technology Press of Stamford, Conn.—the publishers of *Printmarkets*, a highly useful source of industry data—and *Graphic Arts Monthly's* own database.

Reprints of this installation may be ordered from Holly Hoffman, GRAPHIC ARTS MONTHLY, 249 W. 17th St., New York, NY 10011.

By Peter Johnston
Special Projects Manager

Regional Overview

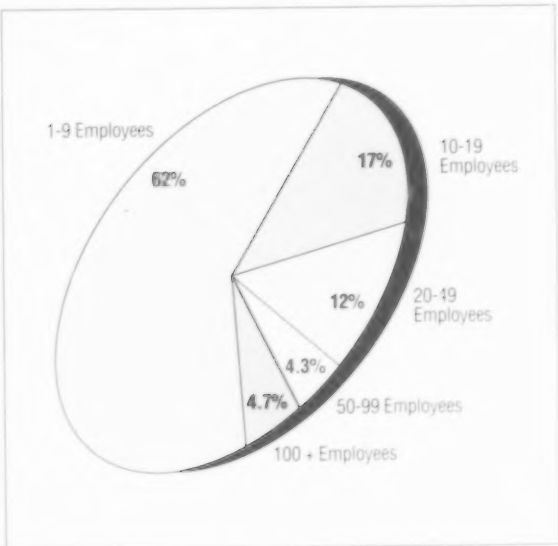
Note that these figures, taken from the GAM database, reflect the universe of printers in its widest sense. In most of the data on the next three pages, a smaller—though still quite large—universe of printers will be used. This is because we will be concerned with the way the printing industry in the Mountain region is divided up in terms of the economic characteristics of the region's printing. This requires us to exclude newspapers, in-plant printers, and certain plants that, while clearly printers, aren't *economically measurable* as such.

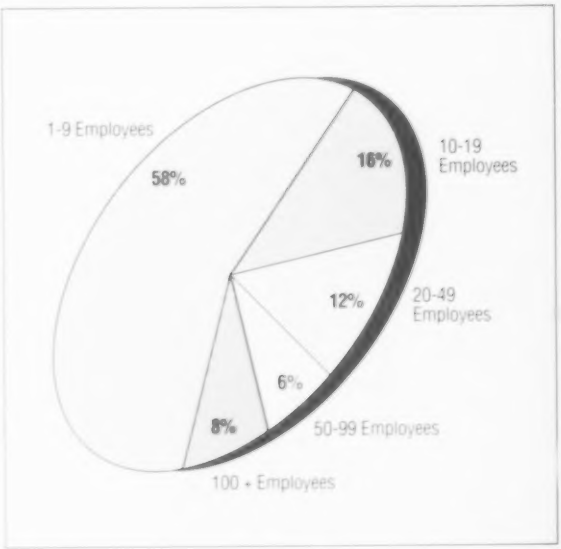
Mountain Region, Plants by Employee Count

Size	# of Plants	% of Region
1–9 Employees	1,423	62%
10–19 Employees	395	17%
20–49 Employees	284	12%
50–99 Employees	105	4.3%
100 + Employees	109	4.7%
TOTAL	**2,316**	**100%**

United States, Plants by Employee Count

Size	# of Plants	% of Total
1–9 Employees	29,815	58%
10–19 Employees	8,381	16%
20–49 Employees	6,428	12%
50–99 Employees	3,147	6%
100 + Employees	3,846	8%
TOTAL	**51,617**	**100%**





Charts and graphs by Lisa Hilgers

Plants by Function

The Mountain region accounts for about 3.6% of the total U.S. industry. Note the high incidence of newspapers. People are scattered, so local news comes from many small-circulation dailies and weeklies.

Function	# of Plants	% of U.S. Total
Commercial	1,183	4.5%
Newspaper (w/ Commercial)	94	5.8%
Newspaper (w/o Commercial)	131	5.8%
Book & Pub	139	5.5%
Business Forms	32	4.0%
Converters	34	1.8%
Noncommercial	307	4.0%
Trade	146	3.4%
Quick Printers	250	5.5%

Equipment Distribution

Equipment	Sites in Region	% of U.S. Total
Color Scanners	116	4.4%
Sheetfed Presses	1,707	7.1%
Heatset Web Offset Presses	134	3.5%
Folders	924	2.9%

To make sense of these figures, remember that they represent not pieces of equipment but sites where that equipment can be found. The high number for sheetfed presses, for instance, simply means that they are divided up among a larger number of smaller shops than is the national norm. In fact, if you look at the total number of printing sites, it works out to about one press per plant. As for color scanners, in this region are companies doing a national prepress business, notably Arizona's American Color and Colorado's Spectrum.

Commercial Printing

Value of Shipments

Three states (Colorado, Arizona, and—to a lesser extent—Utah) account for 78% of the printing in the region; Colorado alone accounts for more than a third of it. By contrast, Montana and Wyoming together offer $100 million in print sales, less than can be found in an average block in lower Manhattan. Printing is where the people are.

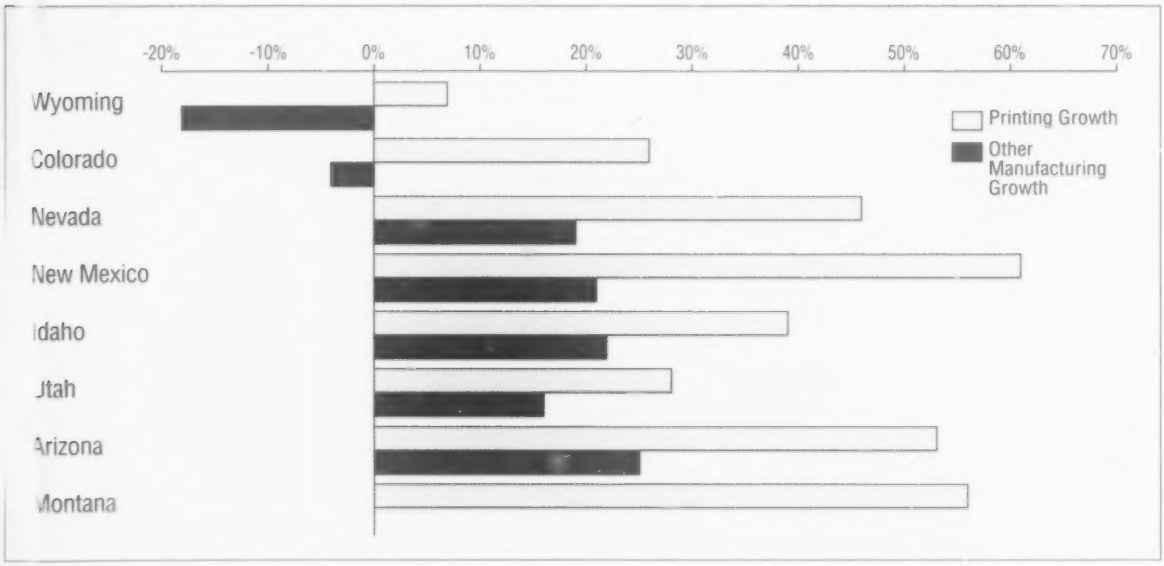
State	Sales	%
Colorado	782	34%
Arizona	658	28%
Utah	363	16%
Idaho	160	7%
New Mexico	134	6%
Nevada	116	5%
Montana	74	3%
Wyoming	26	1%
TOTAL	**2,313**	**100%**

Printing Sites

State	Sites	%
Colorado	651	38%
Arizona	454	27%
Utah	193	11%
New Mexico	128	7%
Nevada	100	6%
Idaho	92	5%
Montana	73	4%
Wyoming	42	2%
TOTAL	**1,733**	**100%**

The distribution of printing sites closely reflects the distribution of sales volume (value of shipments). Colorado, Arizona, and Utah account for 76% of the manufacturing sites in the region. Wyoming, which has 1% of the region's sales, has 2% of its sites, which is consistent with its demographics. Fewer large towns (Wyoming has only two, Casper and Cheyenne) equal fewer large printers.

Printing Employment



Industry employment, by state, is almost exactly proportional to value of shipments. Once again, Colorado is the clear leader in the region, closely followed by Arizona and less closely by Utah. In terms of employment growth, most of the region had a spectacular period during the time measured here (1982-1988), not only in printing but also in other manufacturing.

State	Employees	State	Employees
Colorado	9,294	New Mexico	1,638
Arizona	7,652	Nevada	1,416
Utah	3,899	Montana	897
Idaho	1,666	Wyoming	321
		TOTAL	**26,783**

Leading Printers in Major Markets

Company	Location	Sales
INSERT PRINTERS		**Total 139.0**
R.R. Donnelley & Sons Company	Reno, NV	35.0
Meredith/Burda Corporation	Casa Grande, AZ	30.0
Treasure Chest Advertising	Salt Lake City, UT	25.0
Treasure Chest Advertising	Sparks, NV	15.0
Graphics Arts Publishing, Inc.	Boise, ID	11.5
A.B. Hirschfeld Press, Inc.	Denver, CO	9.0
Intermountain Color	Boulder, CO	8.0
Colorgraphics of Utah	Bountiful, UT	5.5
GREETING CARD PRINTERS		**Total 111.3**
Current, Inc.	Colorado Springs, CO	111.3
CATALOG PRINTERS		**Total 106.0**
R.R. Donnelley & Sons Company	Reno, NV	50.0
Ringier America, Inc.	Phoenix, AZ	40.0
A.B. Hirschfeld Press, Inc.	Denver, CO	5.5
Messenger Graphics	Phoenix, AZ	3.0
Eastwood Printing & Publishing	Denver, CO	2.5
Publishers Press, Inc.	Salt Lake City, UT	2.5
American Web, Inc.	Denver, CO	2.5

Company	Location	Sales
PREPRESS		**Total 94.0**
GBP Industries	Phoenix, AZ	55.0
Volt Technical Services	Phoenix, AZ	23.0
Spectrum, Incorporated	Golden, CO	14.5
Messenger Graphics	Phoenix, AZ	1.5
COMMERCIAL/SPECIALTY PRINTERS		**Total 83.5**
Rocky Mountain Bank Note	Lakewood, CO	15.0
Pro Litho	Provo, UT	12.0
Current, Inc.	Colorado Springs, CO	12.0
Frederic Printing	Aurora, CO	10.0
Imperial Litho Graphics	Phoenix, AZ	10.0
Salt Lake Printing Center	Salt Lake City, UT	8.5
Kistler Graphics	Denver, CO	8.0
Blaine Hudson Printing	Salt Lake City, UT	7.5
Messenger Graphics	Phoenix, AZ	3.0
Colorgraphics of Utah	Bountiful, UT	2.0
Publishers Press, Inc.	Salt Lake City, UT	1.5
DIRECTORY PRINTERS		**Total 76.0**
Norwest Publishing Company	Greeley, CO	70.0
Graphics Arts Publishing, Inc.	Boise, ID	6.0

Demographics in Mountain Region

Population and Migration

State	Population (000)	Rank	Migration (See text.)	Change (%, 80-86)
Arizona	3,279,000	26	365,000	22.1
Colorado	3,267,000	27	165,000	13.1
Utah	1,665,000	35	10,000	14.0
New Mexico	1,479,000	37	64,000	13.5
Idaho	1,002,000	41	−15,000	6.2
Nevada	963,000	43	113,000	20.3
Montana	819,000	44	−14,000	4.1
Wyoming	507,000	50	−6,000	8.0
TOTAL	**12,981,000**		**682,000**	

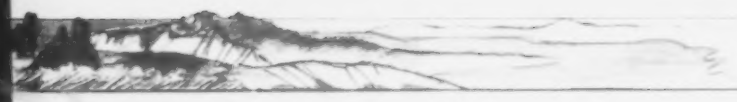
Potential Labor Pool

State	Age 15-24 (% Population)	Unemployment Rate (%)
Utah	18.7%	6.0
Wyoming	18.1%	9.0
New Mexico	17.3%	9.2
Arizona	17.1%	6.9
Nevada	16.9%	6.0
Montana	16.1%	8.1
Idaho	15.8%	8.7
Colorado	14.0%	7.4

When we look at these statistics we see a microcosm of what is happening in the United States at large. The figure for migration is a particularly important one; it shows what is really happening to a state's population once the birth and death rate are factored out. For example, the figures show that between 1980 and 1986, 365,000 people who used to live somewhere else moved to Arizona. While some of those were of course children, a substantial number were skilled or semiskilled workers--which is precisely what the printing industry needs if it is to grow. By contrast, during the same period Idaho lost 15,000 people ,and Montana and Wyoming together lost 20,000. Again, those are people who moved away, mostly looking for better economic opportunities.

On the other hand, all these states have a substantial percentage of young people and relatively high unemployment, which means that there are people available. The industry may have to train them, but they are there.

As noted, it is a reasonably well-educated populace. The problem here, if you want to think of it as a problem, is simply the small numbers of people. Again, it is necessary to keep the history and geography of the region in mind. Much of the land in all these states is given over to national forests, which means that it cannot be developed. In addition there are national parks and Indian reservations to be taken into acount. (The Navajo reservation that straddles New Mexico, Arizona and Utah is substantially larger than New England.)



MOUNTAIN

'ables of leading printers given in order of overall market size. This will vary from region to region.

Company	Location	Sales
[illegible]		
Rocky Mountain Bank Note	Lakewood, CO	40.0
Woehrmyer Business Forms	Aurora, CO	13.0
BEI Graphics	Boulder, CO	11.0
FINANCIAL/LEGAL PRINTERS		**Total 60.0**
Rocky Mountain Bank Note	Lakewood, CO	60.0
MAGAZINE PRINTERS		**Total 56.0**
American Web, Inc	Denver, CO	13.5
Pacific Press Publishing Assn	Boise, ID	8.5
A.B. Hirschfeld Press, Inc	Denver, CO	7.0
Eastwood Printing & Publishing	Denver, CO	6.5
Ringier America, Inc	Phoenix, AZ	5.0
Salt Lake Printing Center	Salt Lake City, UT	4.5
Intermountain Color	Boulder, CO	3.5
Colorgraphics of Utah	Bountiful, UT	3.5
Messenger Graphics	Phoenix, AZ	2.5
Publishers Press, Inc	Salt Lake City, UT	1.5

Company	Location	Sales
ADVERTISING PRINTERS		**Total 27.5**
Imperial Litho Graphics	Phoenix, AZ	12.0
Pro Litho	Provo, UT	6.0
Frederic Printing	Aurora, CO	5.0
Blaine Hudson Printing	Salt Lake City, UT	4.5
BOOK PRINTERS		**Total 26.0**
Publishers Press, Inc	Salt Lake City, UT	7.5
Pacific Press Publishing Assn	Boise, ID	7.0
Salt Lake Printing Center	Salt Lake City, UT	6.5
Messenger Graphics	Phoenix, AZ	5.0
DIRECT MAIL PRINTERS		**Total 25.2**
Mail Well Envelope	Phoenix, AZ	17.2
Kistler Graphics	Denver, CO	8.0

Figures given for sales are in millions of dollars. Data taken from Printmarkets, Trade & Technology Press, Stamford, Conn.

If you'd like to rent the list of names of people in any of the printing establishments in this section, please contact Jim Long, Direct Mail Services, Cahners Publishing, 249 W. 17th St., N.Y., N.Y. 10011; or call 1-800-537-7930.

The north-south distribution shows up again in per-capita income--though here Wyoming is not at the bottom of the heap. These numbers reflect the kinds of jobs available in the region, the economic situation, and (except for Aspen, Colorado and a few similar pockets of economic derangement) the cost of living.

Let's put this in perspective. So far in this series we have looked at New England, the South Atlantic, the East North Central, and the East South Central regions, comprising 23 states and the District of Columbia. They would *all* fit into the Mountain region, with room left over for New York, New Jersey, Pennsylvania, Arkansas, and Louisiana. The West is more crowded than it used to be, but compared to the East it's still empty.

Land Area

State	Area (sq. mi.)
Montana	145,388
New Mexico	121,335
Arizona	113,508
Nevada	109,894
Colorado	103,595
Wyoming	96,989
Idaho	82,412
Utah	82,073
TOTAL	**855,194**

Educational Attainment

State	High School (12+ years)	College (16+ years)
Utah	80.0%	19.9%
Colorado	78.6%	23.0%
Wyoming	77.9%	17.2%
Nevada	75.5%	14.4%
Montana	74.4%	17.5%
Idaho	73.7%	15.8%
Arizona	72.4%	17.4%
New Mexico	68.9%	17.6%
U.S. Average	66.5%	16.2%

Income and Bank Deposits

State	Income (Per Capita)	Rank	Bank Deposit Increase 1985–1986, %
Colorado	$11,713	9	6.8%
Nevada	11,200	14	23.2%
Arizona	10,561	21	13.3%
Wyoming	9,782	32	−2.1%
New Mexico	8,814	41	2.7%
Montana	8,781	42	−2.4%
Idaho	8,567	45	−0.3%
Utah	8,535	47	7.3%
U.S. Average	$10,797		9.0%

$10.00

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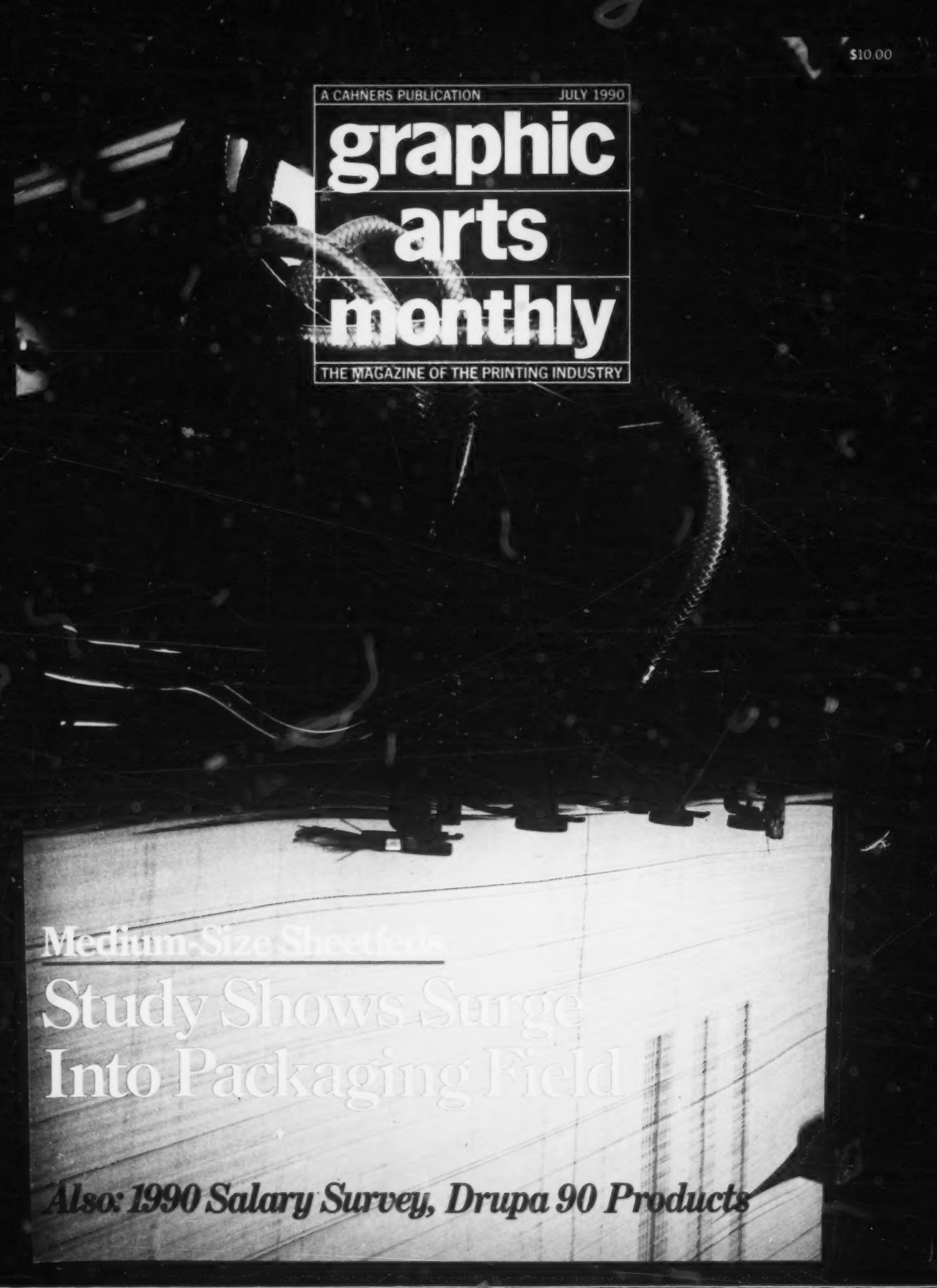
graphic arts monthly

THE MAGAZINE OF THE PRINTING INDUSTRY



Medium-Size Sheetfeds

Study Shows Surge Into Packaging Field

Also: 1990 Salary Survey, Drupa 90 Products

VOLUME 62, NUMBER 7

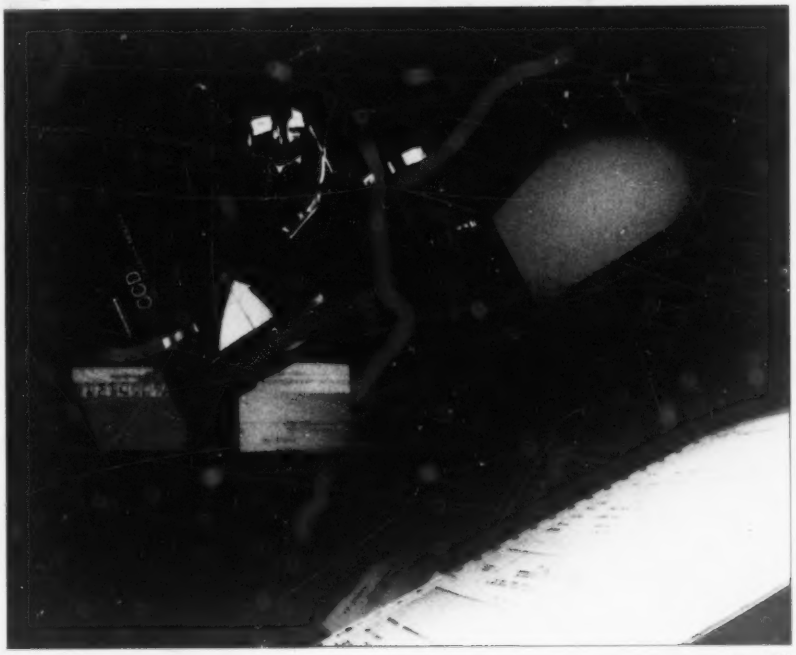
A CAHNERS PUBLICATION JULY 1990

TOTAL CIRCULATION: 99,585

graphic arts monthly

THE MAGAZINE OF THE PRINTING INDUSTRY

FEATURES



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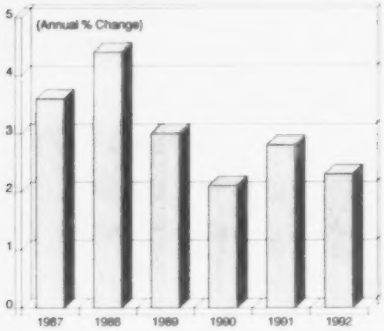
Economy Rides Its Peacetime Expansion



The end of last year through the beginning of this year was, as expected, the weak point of the economy for this business cycle. The economy came perilously close to falling into a recession during the six-month period. Yet only isolated sectors actually experienced recessionary conditions, slowing consumer income and spending growth briefly.

In some ways, the downturn paralleled that of mid-1986, the last time a recession was narrowly avoided. In both cases, the slowdown was relatively mild and short-lived, and federal policy makers were able to accurately anticipate the coming weakness and take corrective actions.

The nature of this downturn was somewhat different, however. Four years ago, the manufacturing sector bore almost the entire brunt of a slowing economy. This time, the weakness in the economy was shared by all sectors. And where the weak manufacturing sector in 1986 produced a manufacturing-led rebound in 1987 and 1988, we can now expect the upturn to be shared equally by services and manufacturing.

Signs of an upturn throughout the economy are already beginning to emerge. The economy scored points in the first quarter of 1990, growing at an annualized 1.3% after squeaking out 1.1% growth in the final quarter of last year. Because growth came largely from big-ticket spending by both consumers and businesses, Cahners Economics' soft-landing scenario now looks assured.

Watch for a relatively weak second quarter (with 2.0% growth) characterized by conflicting economic signals, followed by sustained growth through 1991. We expect GNP to advance 2.1% this year and 2.8% in 1991. Although our forecast is optimistic, we expect slight upward revisions to the first-quarter data that will keep our forecasts near the mark. The longest peacetime expansion will continue to march on.

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In March 1990, employment in the printing and publishing industry stood just below 1.63 million people, 27,400 more than year-ago levels. A good portion of this gain was seen in the commercial printing sector, which had 11,500 more employees in March 1990 than in March 1989. Average hourly wages paid to printing production employees also have an edge over the printing and publishing industry as a whole. Expect wage increases throughout the industry in the 3.0% range over the next several years.

PRINTING INDUSTRY SUPPLY INDICATORS

				Annual Percent Change			
	Mar 89	Feb 90	Mar 90	1989	1990	1991	1992
Employment							
Printing & publishing (1)	1599.8	1624.9	1627.2	2.9	1.6	2.8	3.0
Commercial printing (1)	570.6	580.7	582.1	3.5	2.0	2.8	3.7
Productivity							
Printing & publishing (2)	98.2	97.9	99.0	.31	1.8	5.2	1.5
Average Hourly Earnings							
Printing & publishing (3)	10.79	11.09	11.13	3.3	3.1	3.0	3.5
Commercial printing (3)	11.08	11.37	11.44	3.4	3.0	2.9	3.7
Paper shipments							
Coated paper (4)	604	578	616	-2.6	5.2	8.2	2.5
Uncoated groundwood (4)	147	142	160	10.1	4.4	4.5	2.7
Uncoated free sheet (4)	1003	930	1008	-2.6	.71	4.6	1.6
	Q4/88	**Q3/89**	**Q4/89**	**1989**	**1990**	**1991**	**1992**
Graphic Arts Machinery							
New orders (5)	160.5	123.1	157.1	-4.9	12.4	8.2	4.0
Shipments (5)	166.0	160.6	155.0	4.0	2.4	15.3	3.8
Graphic Arts Supplies							
Shipments (5)	149.5	143.3	150.2	4.3	1.3	4.4	3.4

(1) thousands of employees, U.S. Dept. of Labor; (2) index, 1977 = 100, Cahners Economics; (3) dollars per hour, U.S. Dept. of Labor; (4) thousands of short tons, American Paper Institute; (5) index, 1981 = 100, NPES. All forecasts by Cahners Economics.

Who Makes What

Hands down, the New England region is the best place to find the highest salaries in commercial printing, so don't look for comparably high pay in the East South Central region. Meantime, across-the-board increases occurred in all positions this past year.

These were among the findings of the 1990 Salary Survey conducted by GAM, the second edition in the annual series. The study results are presented in the detachable double-gatefold form appearing opposite this page; if the form has been removed, refer to ordering information at the end of this page.

The yawning gap between salary levels in New England and those in the East South Central region was only one striking result. Combined, the six states in New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont) reported higher-than-average salaries in 20 out of the 24 job categories surveyed, and further, among the highest-paying jobs, the states doubled their count from last year, now claiming 10 of the 24 slots.

By contrast, the East South Central region (Alabama, Kentucky, Mississippi, and Tennessee) fared badly compared to last year's study, now accounting for 10 of the lowest-paying jobs out of the two dozen positions, up from just one in the previous study. Moreover, East South Central reported lower-than-average salaries in 19 of the 24 job categories.

However, closer examination reveals that this wide salary spread between the New England and East South Central regions masks the fact that salary differences by region are generally less than salary differences by company employee count and by revenue.

In other words, when respondents' plants are arranged by geographic regions, in 11 out of the 24 job slots the lowest figure is more than half the highest figure, such as $46,700 vs. $64,900 for VP–manufacturing. However, when comparing companies by employee count (less than 10 vs. 200 or more) and by annual revenue (less than $500,000 vs. $20 million or more), the incidence that the lowest figure is more than half the highest figure falls to just three out of 24 in both cases.

One general conclusion: wide salary spreads result more from company size than from geographic location.

Incidentally, in all three cases, the top slot—chairman of the board—reflects the greatest spread from lowest to highest, $36,000 vs. $182,300 (average salaries by region), $41,800 vs. $361,800 (average by employee count), and $40,100 vs. $320,900 (average by revenue). Many other revealing findings can be uncovered in this year's salary study.

The survey questionnaire was sent to a reader list of 2,000 names; when the study closed, 405 usable responses had been received, up from 360 last year. Three job titles were added, including human resources manager, purchasing, and quality control supervisor, for a total of 24 slots.

Note that the figures given here are for base salary only, without any extras, and that this year's pool of respondents is not necessarily the same as last year's pool. The column adjacent to the national averages indicates percentage change for the same position as reported in the study last year, not as reported by the study respondents this year. Also, no wage rates are given for operator positions.

Additional copies of the GAM 1990 Salary Survey can be purchased, $5 each, or $3 each for 10 or more. Contact Carol Bien, GRAPHIC ARTS MONTHLY Reprints, 1350 E. Touhy Ave., Des Plaines, Ill. 60018; be sure to send payment with order and make checks payable to Cahners Publishing Company.

1990 SALARY SURVEY

	National Average	% Change from Previous Year*	AVERAGE SALARIES: By Region (See Key) Lowest	By Region (See Key) Highest	By Employee Count: Less than 10	By Employee Count: 200 or more	By Revenue: $500,000	By Revenue: $20 million
MANAGEMENT STAFF								
Chairman of the Board	$137,300	+167.1%	$36,000 (M)	$182,300 (SA)	$41,800	$361,800	$40,100	$320,900
President/Owner	69,700	+14.6	38,500 (ESC)	84,400 (MA)	42,100	187,900	39,500	193,200
General Manager	51,800	+29.8	22,000 (ESC)	67,400 (WNC)	32,200	107,100	28,200	90,400
VP—Sales & Marketing	76,400	+59.5	27,900 (ESC)	104,600 (SA)	35,600	149,500	35,500	141,300
VP—Finance	61,500	+37.6	45,400 (WSC)	97,600 (MA)	25,500	89,100	32,300	87,400
VP—Manufacturing	59,100	+28.5	46,700 (ESC)	64,900 (MA)	32,800	85,500	30,800	86,700
OFFICE/FINANCIAL								
Controller	41,500	+25.2	37,000 (NE)	60,500 (WNC)	43,000	58,900	45,000	57,900
Estimator/Planner	32,000	+4.6	25,700 (M)	34,800 (NE)	27,300	38,000	26,400	37,000
Office Manager	23,200	+8.4	16,300 (WNC)	29,000 (NE)	17,900	30,500	18,100	32,000
Human Resources Manager	39,600	N/A	26,900 (P)	56,300 (WSC)	14,500	48,400	14,500	46,400
Purchasing	32,500	N/A	20,000 (ESC)	46,300 (NE)	17,000	47,400	20,900	48,400
PRODUCTION MANAGEMENT								
Plant Manager/Superintendent	42,800	+29.3	23,300 (ESC)	50,200 (NE)	24,700	67,700	24,300	65,900
Production Manager	34,300	+27.0	24,100 (M)	50,000 (ESC)	23,700	53,600	22,000	51,500
Quality Control Supervisor	34,300	N/A	29,100 (WNC)	49,000 (NE)	17,000	41,600	17,000	42,700
Production Scheduler	28,500	+17.8	18,000 (ESC)	35,600 (NE)	15,000	31,800	15,000	32,300
DEPARTMENT FOREMAN								
Composition Foreman	26,900	+26.9	14,300 (ESC)	30,300 (SA)	16,000	40,200	16,500	41,000
Prep Department Foreman	35,100	+19.4	25,800 (M)	39,600 (P)	21,700	45,000	16,900	45,900
Press Department Foreman	34,200	+30.0	22,200 (M)	37,400 (P)	22,500	50,300	21,600	49,300
Bindery Department Foreman	33,100	+34.5	16,600 (M)	37,800 (NE)	17,000	49,200	15,300	49,000
Maintenance Foreman	33,300	+15.2	15,000 (M)	68,000 (NE)	15,000	42,000	13,800	41,700
SALES/MARKETING								
Sales Manager	54,800	+34.0	37,500 (ESC)	85,000 (NE)	29,300	81,900	26,800	78,900
Sales Representative	39,100	+18.5	25,200 (ESC)	45,300 (NE)	26,000	65,200	26,000	65,100
Customer Service Manager	30,300	+27.5	27,200 (P)	40,000 (ESC)	19,300	40,300	15,300	38,200
Counter/Order Clerk	17,300	+30.1	12,100 (WNC)	19,800 (ENC)	13,700	27,500	13,800	26,100

*Indicates comparison to 1989 study results only, not actual salary increases.

ABOUT THIS SURVEY

In late March, a cover letter and two-page questionnaire were mailed to 2,000 Graphic Arts Monthly readers in preparation for this survey of annual salaries in the commercial printing industry. They were selected on an Nth name basis from GAM's controlled circulation, pinpointing readers whose company's primary business is general commercial printing and quick printing, and whose primary job function is business management. Three of four respondents were an officer, partner, owner, or president.

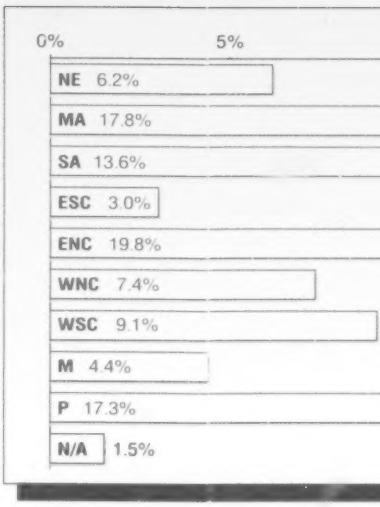
When the survey closed, 405 respondents had completed and returned the questionnaire, for a response rate of 20%.

A total of 24 job titles are covered here. National average salaries for each appear, along with the percentage change from the figure in last year's study.

Average salaries in three major segments are shown: by region, by total number of employees at the respondents' location, and by annual sales revenue in the respondents' companies. Salaries in individual categories are based on the respondents answering in that category. In all cases, figures given are for base salary only; period covered is the current or most-recent fiscal year.

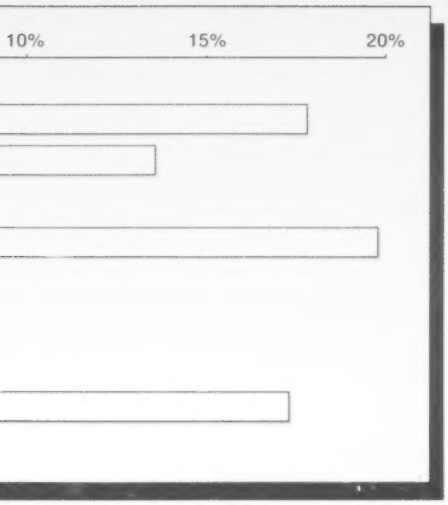
In supplying the requested information, respondents were quite honest, accurate, and thorough (the tables above are more than 98% complete). Readers are encouraged to spend some time in studying the information, analyzing trends, and making comparisons between job titles, regions, and company sizes.

RESPONDENTS' LO



AVERAGE SALARIES BY REGION (SEE KEY)								
(NE) New England	(MA) Middle Atlantic	(SA) South Atlantic	(ESC) East South Central	(ENC) East North Central	(WNC) West North Central	(WSC) West South Central	(M) Mountain	(P) Pacific
$133,300	$79,200	$182,300	$52,500	$156,500	$125,000	$95,000	$36,000	$112,800
58,500	84,400	66,800	38,500	73,400	60,000	57,500	61,600	72,700
48,300	51,400	52,400	22,000	50,700	67,400	46,000	43,500	55,000
82,000	91,600	104,600	27,900	66,800	62,000	71,100	—	70,800
81,700	97,600	58,700	56,500	56,400	53,400	45,400	—	55,100
60,400	64,900	60,500	46,700	57,500	57,800	62,100	—	56,700
37,000	38,300	41,900	47,500	38,400	60,500	37,700	—	44,700
34,800	33,200	34,700	30,000	31,300	28,900	29,600	25,700	32,000
29,000	22,900	23,600	17,500	23,200	16,300	20,900	21,300	25,000
44,000	50,000	36,300	—	34,800	40,200	56,300	—	26,900
46,300	41,400	26,100	20,000	32,900	38,000	31,600	23,400	26,900
50,200	45,500	37,900	23,300	41,100	44,400	47,100	37,700	45,000
40,500	35,600	35,400	50,000	33,200	36,400	33,100	24,100	31,900
49,000	38,300	31,600	—	35,200	29,100	39,500	—	33,000
35,600	34,500	34,200	18,000	24,400	27,800	20,800	—	26,700
30,000	26,600	30,300	14,300	28,100	21,500	27,100	20,800	27,400
37,900	30,600	38,200	34,500	33,100	35,100	31,700	25,800	39,600
36,700	36,400	35,200	26,300	31,700	36,900	30,900	22,200	37,400
37,800	37,300	34,400	26,500	32,800	31,400	28,600	16,600	33,700
68,000	31,300	37,500	18,000	35,200	35,500	31,500	15,000	27,300
85,000	70,100	59,300	37,500	48,500	48,300	47,500	45,000	51,900
45,300	36,600	42,300	25,200	41,000	35,800	35,600	36,800	40,200
34,700	28,300	29,000	40,000	32,300	27,400	30,800	29,500	27,200
19,600	16,300	16,300	13,300	19,800	12,100	12,600	15,500	18,500

OCATIONS (See Key)



HIGHLIGHTS

This year's survey uncovered items of interest:

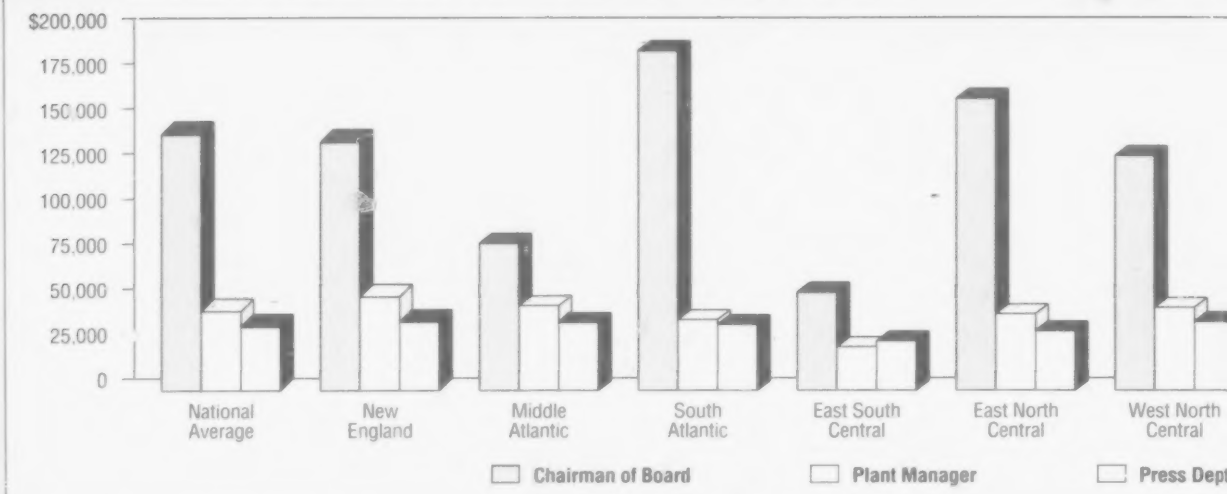
• Respondents' firms in 1989 averaged $3.5 million in annual sales and 35 employees; 76% of the respondents described themselves as general commercial printers, while 13% said they were quick printers. Also, 89% of the respondents describe their company as an open shop; 5% said it is a union shop; and 4% describe it as a combination.

• Compared to the national averages, New England and East South Central are opposites, the former reporting higher-than-average salaries in 20 of 24 categories, and the latter reporting lower salaries in 19 categories. Further, among the highest-paying jobs, the New England region doubled its count from last year, now claiming 10 of the 24 slots. The East South Central region fared badly compared to last year's study, accounting for 10 of the lowest-paying jobs out of 24 total positions, up from just one in the previous study.

COMPILED BY

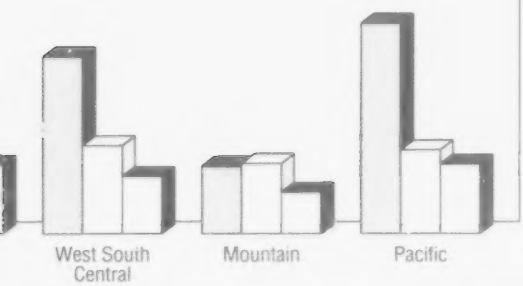
	AVERAGE SALARIES BY EMPLOYEE COUNT							
	Less than 10	10-19	20-49	50-99	100-149	150-199	200 or more	Less than $500,000
MANAGEMENT STAFF								
Chairman of the Board	$41,800	$74,200	$107,900	$125,800	$154,000	$ 60,000	$361,800	$40,100
President/Owner	42,100	72,300	93,000	108,600	129,600	88,300	187,900	39,500
General Manager	32,200	45,300	60,900	60,600	77,000	85,500	107,100	28,200
VP—Sales & Marketing	35,600	43,600	60,700	74,700	74,000	108,500	149,500	35,500
VP—Finance	25,500	61,800	53,600	53,300	64,200	57,700	89,100	32,300
VP—Manufacturing	32,800	38,900	55,400	54,900	54,700	30,000	85,500	30,800
OFFICE FINANCIAL								
Controller	43,000	30,900	39,000	42,400	42,500	40,300	58,900	45,000
Estimator/Planner	27,300	26,300	30,400	34,000	34,100	30,300	38,000	26,400
Office Manager	17,900	23,200	26,100	26,400	33,000	32,500	30,500	18,100
Human Resources Manager	14,500	—	45,000	28,800	33,300	21,000	48,400	14,500
Purchasing	17,000	26,300	28,100	25,500	30,600	32,700	47,400	20,900
PRODUCTION MANAGEMENT								
Plant Manager/Superintendent	24,700	35,700	40,700	49,200	50,700	50,800	67,700	24,300
Production Manager	23,700	30,400	38,200	39,700	50,000	39,700	53,600	22,000
Quality Control Supervisor	17,000	26,300	28,000	34,200	41,100	42,300	41,600	17,000
Production Scheduler	15,000	22,000	29,400	27,500	32,900	30,600	31,800	15,000
DEPARTMENT FOREMAN								
Composition Foreman	16,000	25,100	28,100	28,200	34,800	30,000	40,200	16,500
Prep Department Foreman	21,700	29,500	35,200	38,600	44,700	36,100	45,000	16,900
Press Department Foreman	22,500	31,400	37,400	40,500	46,400	38,900	50,300	21,600
Bindery Department Foreman	17,000	27,100	31,800	32,900	41,700	35,300	49,200	15,300
Maintenance Foreman	15,000	14,500	24,600	28,200	33,000	41,300	42,000	13,800
SALES/MARKETING								
Sales Manager	29,300	43,200	46,900	61,600	82,000	55,000	81,900	26,800
Sales Representative	26,000	29,100	40,000	42,900	53,200	40,000	65,200	26,000
Customer Service Manager	19,300	23,900	26,800	30,900	30,500	37,300	40,300	15,300
Counter/Order Clerk	13,700	15,700	18,700	19,200	22,300	18,000	27,500	13,800

HOW THREE JOB TITLES VARY BY REGION

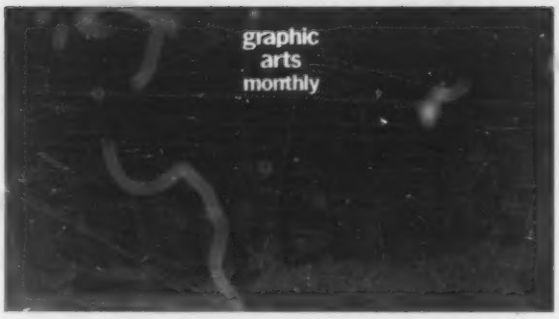


GRAPHIC ARTS MONTHLY

AVERAGE SALARIES BY COMPANY REVENUE				
$500,000-$999,999	$1 million-$4.9 million	$5 million-$9.9 million	$10 million-$19.9 million	$20 million or more
$55,000	$93,900	$111,800	$179,500	$320,900
57,600	86,700	122,200	133,600	193,200
37,900	53,800	83,800	82,400	90,400
36,000	54,200	79,700	84,700	141,300
29,700	55,400	62,900	62,600	87,400
37,000	48,700	56,900	56,500	86,700
26,600	36,400	44,700	41,800	57,900
22,500	29,600	35,800	34,100	37,000
20,300	25,300	28,300	34,200	32,000
—	24,500	34,000	33,700	46,400
—	23,900	28,400	30,100	42,400
31,100	38,000	53,400	54,600	65,900
29,500	36,300	41,100	47,200	51,500
22,000	30,300	30,900	43,600	42,700
17,800	23,500	31,000	30,800	32,300
21,700	26,500	30,400	29,000	41,000
27,900	32,200	39,800	43,500	45,900
29,100	34,600	43,200	44,200	42,000
23,100	29,500	36,900	38,600	49,000
—	20,700	25,500	36,700	41,700
35,800	46,400	66,900	80,300	78,900
26,300	37,700	45,400	49,100	65,100
22,100	26,600	30,600	35,500	38,200
14,100	18,200	18,800	21,800	26,100



. Foreman



THE TOP MONEYMAKERS

Shown here are the base salaries of the chief executive officers of leading publicly held printing companies appearing in the annual GAM 101 ranking. The information, compiled by phone interviews, company materials, and proxy statements, is for the most recent fiscal year.

H. William Lurton **$882,333**
Jostens, Minneapolis, Minn.

John R. Walter **$628,691**
R.R. Donnelley & Sons Company, Chicago, Ill.

Harold V. Haverty **$597,073**
Deluxe Corporation, St. Paul, Minn.

Lawrence G. Tapp **$463,893***
Lawson Mardon, Mississauga, Ontario

Mark C. Pope III **$297,000**
Graphic Industries Inc., Atlanta, Ga.

Calvin W. Aurand Jr. **$290,000**
Banta Corporation, Menasha, Wis.

Robert Woodson **$285,644**
John H. Harland Company, Atlanta, Ga.

Leo Benatar **$280,000**
Engraph, Inc., Atlanta, Ga.

William O. Nahikian **$222,377**
Western Publishing Inc., Racine, Wis.

Wallace Stettinius **$219,200**
Cadmus Communications Corp., Richmond, Va.

**Canadian dollars*

KEY TO REGIONS

This survey is based on the following nine geographic regions of the United States:

New England (NE): Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

Mid-Atlantic (MA): New Jersey, New York, Pennsylvania.

South Atlantic (SA): Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, Washington D.C., West Virginia.

East South Central (ESC): Alabama, Kentucky, Mississippi, Tennessee.

East North Central (ENC): Illinois, Indiana, Michigan, Ohio, Wisconsin.

West North Central (WNC): Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.

West South Central (WSC): Arkansas, Louisiana, Oklahoma, Texas.

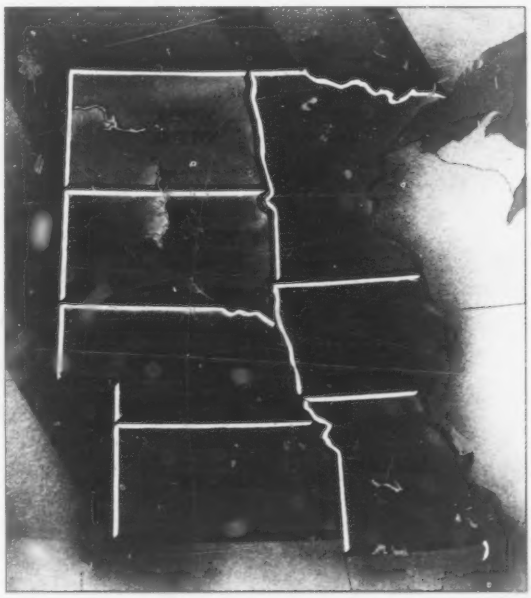
Mountain (M): Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming.

Pacific (P): Alaska, California, Hawaii, Oregon, Washington.

graphic arts monthly

West North Central Region

It's been a quiet week here in the West North Central region. Naturally there was a little commotion in the cities, especially Minneapolis-St. Paul and the Kansas Cities. Kind of strange, when you think about it, the way cities up here huddle together for reassurance—like there's something out there on the prairie that scares 'em.



Jerry Greenberg

Anyway, one of the reasons it's been quiet up here lately is that people are leaving. There's seven states in this region—Kansas, Missouri, Nebraska, Iowa, Minnesota, North Dakota and South Dakota—and every one of 'em has lost population. Some of that's because of the farms; it's been hard times on the farms these past 10 years, and when a farm in someplace like Pocahantas County, Iowa goes belly-up, the young folk don't go to Fort Dodge or Algona or Webster City to better themselves. They go to Chicago or New York.

Printwise—yeah, we gotta talk about this stuff—the big guys in the region are Minnesota and Missouri. Between 'em they've got better than 60% of the printing in the region. That's by sales or sites, take your pick. Iowa and Kansas have another about 30%, split fairly evenly between them. By sales, the Dakotas make up around two and a half percent, by sites around twice that.

Nebraska's a little strange. It's got seven percent of the region's sales and less than one percent of its printing sites. If you take a look at the list of larger printers you'll see a handful of large ones—enough, in a state with an industry as small as Nebraska's, to skew the list.

In fact, all the charts for this region show that kind of distortion. According to our list, the biggest printing markets here are greeting cards and financial, which wouldn't be true except that Hallmark is in Kansas City and Deluxe Check Printers is in St. Paul. (Figures may not lie, but sometimes they exaggerate.)

Demographically we're about in the middle, where sensible folks would want to be. In income, the Dakotas lag behind; they're the most agricultural of the group, and it's going to take them the longest to recover from the farm crisis. Otherwise, things are what they ought to be. Remember, this is the heartland. You don't come to the heartland for surprises. You come here for reassurance. Also a good huckleberry pie.

Data for this report come primarily from Printing Industries of America, the National Association of Printers and Lithographers, the U.S. Bureau of the Census, Trade and Technology Press of Stamford, Conn. (the publishers of *Printmarkets*, a highly useful source of industry data) and Graphic Arts Monthly's own database.

Reprints of this installation of the Geography of Print may be ordered from Holly Hoffman, GRAPHIC ARTS MONTHLY, 249 W. 17th St., New York, NY 10011.

By Peter Johnston
Special Projects Manager

Regional Overview

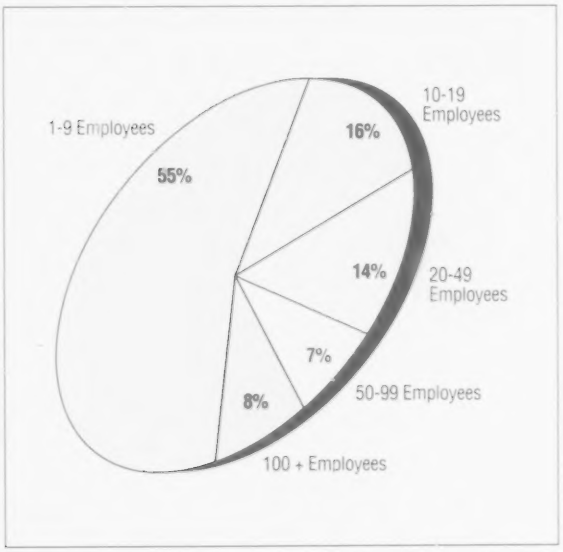
Note that these figures, taken from the GAM database, reflect the universe of printers in its widest sense. In most of the data on the next three pages, a smaller, though nonetheless still very large, universe of printers will be used. This is because we will be concerned with the way the printing industry in the West North Central region is divided up in terms of markets—the economic characteristics of the region's printing. This requires us to exclude newspapers, in-plant printers, and certain other plants (like wallpaper factories, for instance). These folks, while clearly printers, are not *economically measurable* as printers.

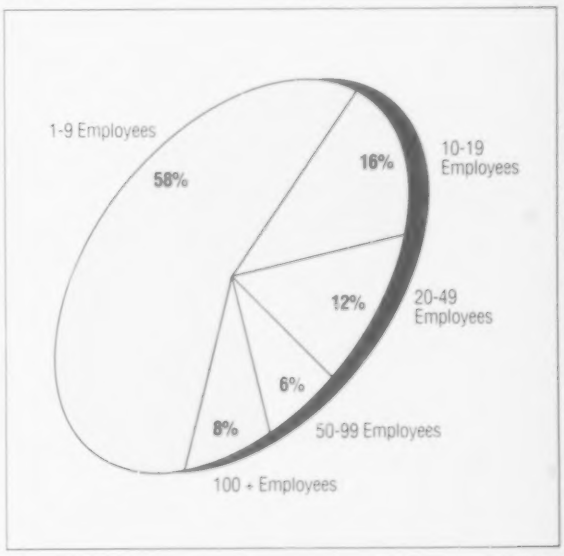
West North Central, Plants by Employee Count

Size	# of Plants	% of Region
1–9 Employees	2,290	55%
10–19 Employees	682	16%
20–49 Employees	574	14%
50–99 Employees	278	7%
100 + Employees	342	8%
TOTAL	**4,166**	**100%**

United States, Plants by Employee Count

Size	# of Plants	% of Total
1–9 Employees	29,815	58%
10–19 Employees	8,381	16%
20–49 Employees	6,428	12%
50–99 Employees	3,147	6%
100 + Employees	3,846	8%
TOTAL	**51,617**	**100%**





Charts and graphs by Lisa Hilgers

Plants by Function

The region accounts for about 8.8% of the total U.S. industry, as measured by value of shipments (gross sales). Since the populace is scattered, we see a high incidence of newspapers, especially small-circulation dailies and weeklies, for distributing local news.

Function	# of Plants	% of U.S. Total
Commercial	1,971	7.5%
Newspaper (w/Commercial)	306	19.0%
Newspaper (w/o Commercial)	250	11.1%
Book & Pub	212	8.3%
Business Forms	64	8.1%
Converters	130	6.9%
Noncommercial	719	9.4%
Trade	273	6.4%
Quick Printers	241	5.3%

Equipment Distribution

Equipment	Sites in Region	% of U.S. Total
Color Scanners	207	7.9%
Sheetfed Presses	3,088	13.0%
Heatset Web Offset Presses	345	9.0%
Folders	2,628	8.5%

These figures represent not pieces of equipment but sites where that equipment can be found. The high number for sheetfed presses means that they are divided up among a larger number of smaller shops than the national norm. Otherwise, equipment distribution corresponds very closely to the distribution of gross printing sales in the region. Note that this is not always the case, especialy in regions containing a disproportionate number of very large sites.

Commercial Printing

Value of Shipments

As noted, the printing industry comes in four sizes in the West North Central: large (Minnesota and Missouri), medium (Kansas and Iowa), small (Nebraska) and very small (North and South Dakota). Four of these seven states have over 90% of the region's printing revenues. Here, instead of the north-south dispersion we've seen in other regions, there is an east-west dispersion, with 75% of printing sales in the three eastern states.

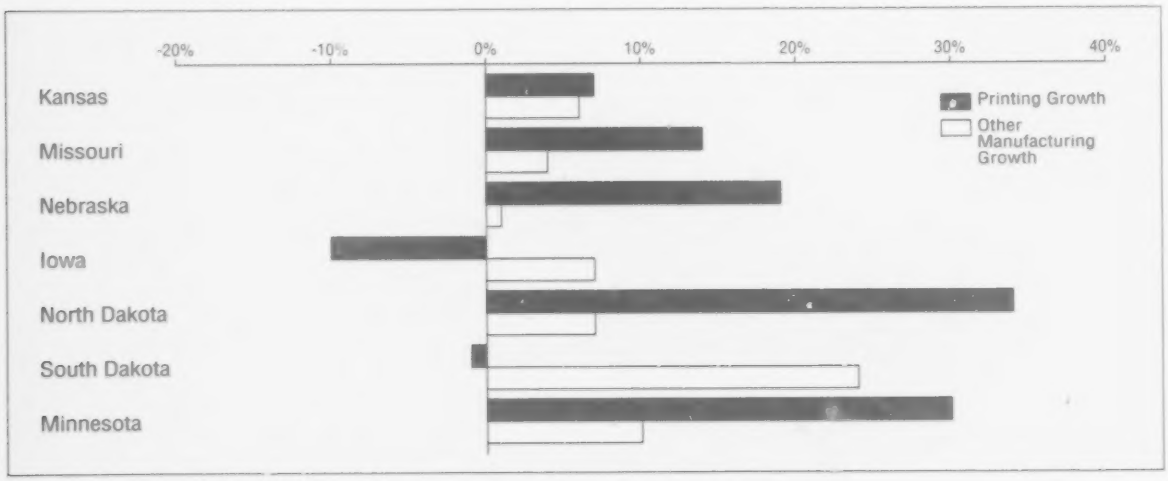
State	Sales	%
Minnesota	2,100	35.5%
Missouri	1,600	27%
Kansas	901	15%
Iowa	735	13%
Nebraska	394	7%
South Dakota	80	1.4%
North Dakota	66	1.1%
TOTAL	**5,876**	**100%**

Printing Sites

State	Sites	%
Missouri	906	35%
Minnesota	754	29%
Iowa	405	16%
Kansas	357	14.5%
South Dakota	65	2.5%
North Dakota	57	2.2%
Nebraska	21	0.8%
TOTAL	**2,565**	**100%**

The distribution of printing sites, not surprisingly, closely reflects the distribution of sales volume (value of shipments). An exception is Nebraska, whose numbers are distorted by the presence of a few quite large companies in an otherwise small statewide industry. Otherwise, the numbers are right on track; Minnesota and Missouri, for instance, have 63% of the region's sales and 64% of its printing sites.

Printing Employment



Industry employment, by state, is almost exactly proportional to value of shipments. Minnesota is the clear leader in the region, closely followed by Missouri and less closely by Kansas. Look closely at the data on industry employment growth. North Dakota looks great with 34%, but the base is so small that it represents only a few hundred jobs. Minnesota has had excellent growth, and so has Missouri. Iowa and South Dakota have *lost* printing industry employment, which is unusual; South Dakota is really undergoing a depression—although the "other manufacturing" figure for South Dakota seems to argue that things aren't as bad as they look. And it appears Iowa isn't far from a depression, either.

State	Employees
Minnesota	25,658
Missouri	19,451
Kansas	10,046
Iowa	8,196
Nebraska	4,586
South Dakota	970
North Dakota	803
TOTAL	**69,710**

Leading Printers in Major Markets

Company/Location	Sales
GREETING CARD	**Total 1089.0**
Hallmark Cards, Kansas City, MO	1,085.0
Omaha Printing, Omaha, NE	4.0
FINANCIAL/LEGAL	**Total 886.0**
Deluxe Check Printers, St. Paul, MN	854.0
Merrill Corp., St. Paul, MN	15.0
Northstar Computer Forms, Minneapolis, MN	12.0
The Bureau of Engraving, Minneapolis, MN	5.0
COMMERCIAL/SPECIALTY	**Total 879.0**
Hallmark Cards, Kansas City, MO	185.0
Jefferson Smurfit, St. Louis, MO	137.0
Brown & Bigelow, St. Paul, MN	95.0
Jostens Printing, Topeka, KS	60.0
Instant Web, Chanhassen, MN	44.0
The Vernon Co., Newton, IA	37.0
DataCard Corp., Minneapolis, MN	33.0
Advertising Unlimited, Sleepy Eye, MN	22.0
Process Displays, Minneapolis, MN	21.0
Walsworth Publishing, Marceline, MO	20.0
National Computer Sys., Eden Prairie, MN	19.0
Thomas D. Murphy (Shaw-Barton), Red Oak, IA	18.0
Vile Goller/Fine Arts, Kansas City, KS	14.5
John Stark Printing, St. Louis, MO	13.0
Color-Art Printing, St. Louis, MO	13.0
The John Roberts Co., Minneapolis, MN	11.5
Burd & Fletcher, Kansas City, MO	11.5
Keeler/Morris Printing, Hazelwood, MO	11.0
MWM Dexter, Aurora, MO	11.0
Barton-Nelson, Kansas City, MO	11.0
Colwell Industries, Minneapolis, MN	10.0
Litho Specialties, St. Paul, MN	10.0
Midland Litho., N. Kansas City, MO	10.0
Anderberg-Lund, Minneapolis, MN	9.5
McGrew Color Graphics, Kansas City, MO	8.0
Bawden Printing, Eldridge, IA	8.0
Merrill Corporation, St. Paul, MN	7.0
Graphic Promotions, Topeka, KS	6.5
Missouri Encom, St. Louis, MO	5.5
Fleming Printing, Fenton, MO	5.0
Harmony Printing, Liberty, MO	4.0
Epsen Hillmer Graphics, Omaha, NE	3.5
Omaha Printing, Omaha, NE	3.5
Buxton & Skinner (Pubco), St. Louis, MO	1.0
MAGAZINE	**Total 537.8**
Meredith/Burda, Des Moines, IA	100.0
Brown Printing, Waseca, MN	95.0
Foote & Davies, Lincoln, NE	60.0
The Hart Press, Long Prairie, MN	40.0
Clark Printing, N. Kansas City, MO	30.0
Maxwell Communications, St. Cloud, MN	25.0
GBP Industries (Sullivan), Marengo, IA	25.0
Maxwell Communications, Fridley, MN	24.0
McCall Pattern Co., Manhattan, KS	19.5
Henry Wurst, North Kansas City, MO	19.0
Gospel Pub. House, Springfield, MO	15.8
Maxwell Communications, St. Paul, MN	15.0
Combined Comm. Svcs., Columbia, MO	14.0
Treasure Chest Advert., Lenexa, KS	10.0
Vile Goller/Fine Arts, Kansas City, KS	9.0
Heartland Press, Spencer, IA	5.0
Nies/Kaiser Printing, St. Louis, MO	5.0
Townsend Communications, Kansas City, MO	5.0
Dimension Graphics, Lenexa, KS	5.0
Shakopee Valley Printing, Shakopee, MN	4.5
American Spirit Graphics, Minneapolis, MN	3.5
Nazarene Publishing, Kansas City, MO	3.5
Northprint Co., Grand Rapids, MN	2.5
McCormick-Armstrong, Wichita, KS	2.5
BUSINESS FORMS	**Total 465.8**
Data Documents, Omaha, NE	155.0
Deluxe Corp., St. Paul, MN	114.2
Adams Business Forms, Topeka, KS	32.0
Ward/Kraft, Fort Scott, KS	20.0
Control-O-Fax, Waterloo, IA	20.0
Economy Data Products, Des Moines, IA	18.5
CB Forms, Ltd., East Prairie, MO	15.0
The Flesh Co., St. Louis, MO	14.5
Ace Forms, Pittsburg, KS	14.0
Holden Business Forms, Minneapolis, MN	13.5
Forms Manufacturers, Girard, KS	13.0
IMI Business Forms, Parsons, KS	10.0
Witt Printing, El Dorado Springs, MO	9.5
Vallis/Wngroff, Cherryvale, KS	9.2
Service Business Forms, Wichita, KS	4.0
Northstar Computer Forms, Minneapolis, MN	3.4
INSERT	**Total 291.5**
GBP Ind. (Sullivan), Marengo, IA	45.0
Valassis Inserts, Wichita, KS	30.0
Treasure Chest Advert., Lenexa, KS	20.0
Goodwin Brothers, St. Louis, MO	18.0
Rapid Printing & Mailing, Omaha, NE	18.0
McGill/Jensen (Banta), St. Paul, MN	15.0
Brown Printing, Waseca, MN	15.0
Henry Wurst, N. Kansas City, MO	14.0
Shakopee Valley Printing, Shakopee, MN	14.0
Schmidt Printing, NW Rochester, MN	12.0
Sayers Printing, St. Louis, MO	11.0
Maxwell Communications, St. Cloud, MN	11.0
Foote & Davies, Lincoln, NE	10.0
Neff Printing, Shawnee Mission, KS	9.5
Gaines & Hanson, New Hope, MN	9.5
Northprint Co., Grand Rapids, MN	8.5
Townsend Communications, Kansas City, MO	7.0
Nies/Kaiser, St. Louis, MO	6.0
Japs-Olson Co., Minneapolis, MN	5.0
Wagners Printers, Davenport, IA	4.0
Downey Printing, Des Moines, IA	4.0
Maxwell Communications, St. Paul, MN	3.0
Maxwell Communications, Fridley, MN	2.0
CATALOG	**Total 275.5**
Brown Printing, Waseca, MN	40.0
Meredith/Burda, Des Moines, IA	30.0

Demographics in West North Central

Population and Migration

State	Population	Rank	Migration (See text.)	Change (%, 80-86)
Missouri	5,066,000	15	−18,000	3.0
Minnesota	4,214,000	21	−72,000	3.4
Iowa	2,851,000	29	−166,000	−2.2
Kansas	2,460,000	32	−18,000	4.1
Nebraska	1,598,000	36	−45,000	1.8
South Dakota	708,000	45	−20,000	2.5
North Dakota	679,000	46	−15,000	4.1
TOTAL	**17,576,000**		**−354,000**	

The figure for migration is a particularly important one; it shows what is really happening to a state's population once the birth and death rate are factored out. This figure represents the number of people who have moved in or out from or to somewhere else. Between 1980 and 1986, the region sustained a net loss of more than 350,000 people, nearly half of them from Iowa alone.

Potential Labor Pool

State	Age 15-24 (% Population)	Unemployment Rate (%)
North Dakota	17.9%	6.3
Minnesota	17.2%	5.3
Nebraska	16.9%	5.0
South Dakota	16.8%	4.7
Kansas	16.8%	5.4
Iowa	16.5%	7.0
Missouri	16.5%	6.1

WEST NORTH CENTRAL

Tables of leading printers given in order of overall market size. This will vary from region to region.

Company/Location	Sales
McGill/Jensen, St. Paul, MN	30.0
Maxwell Communications, St. Paul, MN	25.0
The Printer, Inc. (Banta), Maple Grove, MN	25.0
Foote & Davies, Lincoln, NE	20.0
Maxwell Communications, Fridley, MN	14.0
Maxwell Communications, St. Cloud, MN	14.0
Henry Wurst, N. Kansas City, MO	13.0
Viking Press, (Banta), Eden Prairie, MN	10.0
Sayers Printing, St. Louis, MO	8.5
Universal Printing, St. Louis, MO	8.0
Eagle Litho. Co., Kansas City, MO	8.0
Interstate Printing, Omaha, NE	6.5
The Hart Press, (Banta), Long Prairie, MN	5.0
McCormick-Armstrong, Wichita, KS	4.5
Shakopee Valley Printing, Shakopee, MN	3.5
Dimension Graphics, Lenexa, KS	3.0
Corley Printing, Earth City, MO	2.0
Heartland Press, (Colwell), Spencer, IA	2.0
The Fisher Group, Cedar Rapids, IA	2.0
Merrill Corp., St. Paul, MN	1.5

DIRECT MAIL	Total 251.8
The Press Inc., Chanhassen, MN	25.0
Universal Printing, St. Louis, MO	23.5
Victory Envelope, Chanhassen, MN	20.0
Scoville Press, Plymouth, MN	19.5
McGill/Jensen (Banta), St. Paul, MN	17.0
United Mailing, Chanhassen, MN	17.0
Colwell Industries, Minneapolis, MN	16.0
Sayers Printing, St. Louis, MO	13.5
Japs-Olson Co., Minneapolis, MN	13.0
Wilkes Direct Mail, St. Louis, MO	12.0
The Fisher Group, Cedar Rapids, IA	12.0
Comfort Printing & Stat., St. Louis, MO	9.5
Omaha Printing, Omaha, NE	7.0
The Bureau of Engraving, Minneapolis, MN	7.5
Rapid Printing & Mailing, Omaha, NE	7.0
Missouri Encom, St. Louis, MO	6.5
Gaines & Hanson Printing, New Hope, MN	6.5
McCormick-Armstrong, Wichita, KS	5.0
Interstate Printing, Omaha, NE	5.0

Company/Location	Sales
Eagle Litho. Co., Kansas City, MO	4.0
Schmidt Printing, Northwest Rochester, MN	3.0
Service Bus. Forms, Wichita, KS	2.3

LABEL/WRAPPER	Total 225.2
Data Documents, Omaha, NE	45.0
Epsen Hillmer Graphics, Omaha, NE	31.0
Data Documents, Industrial Airport, KS	30.0
Graphic Technology, Olathe, KS	24.7
TapeMark Co., West St. Paul, MN	23.0
Modern Press, Sioux Falls, SD	19.5
St. Louis Litho., Afton, MO	18.0
Buxton & Skinner, St. Louis, MO	11.0
Meyers Printing Co., Minneapolis, MN	10.5
Jefferson Smurfit Corp., St. Louis, MO	8.0
Ward/Kraft, Inc., Fort Scott, KS	3.5
Service Bus. Forms, Wichita, KS	1.0

ADVERTISING	Total 215.5
The Press, Inc. (Banta), Chanhassen, MN	20.0
The Vernon Co., Newton, IA	19.0
Japs-Olson Co., Minneapolis, MN	16.0
Nies/Kaiser Printing, St. Louis, MO	15.0
Wagners Printers, Davenport, IA	15.0
Advertising Unlimited, Sleepy Eye, MN	14.0
The John Roberts Co., Minneapolis, MN	13.0
Fleming Printing Co., Fenton, MO	12.0
Meyers Printing Co., Minneapolis, MN	11.0
Harmony Printing, Liberty, MO	11.0
Universal Printing, St. Louis, MO	10.5
Midland/Eagle Litho., N. Kansas City, MO	9.0
Litho Specialties, St. Paul, MN	9.0
Graphic Promotions, Topeka, KS	9.0
Color-Art Printing, St. Louis, MO	8.5
McGrew Color Graphics (Pet), Kansas City, MO	7.0
The Bureau of Engraving, Minneapolis, MN	5.0
Anderberg-Lund Printing, Minneapolis, MN	4.0
Burd & Fletcher, Kansas City, MO	4.0
Buxton & Skinner (Pubco), St. Louis, MO	3.5

Company/Location	Sales
BOOK — Total 137.5	
Von Hoffman Press, St. Louis, MO	44.0
Viking Press, (Banta), Eden Prairie, MN	25.0
West Publishing, St. Paul, MN	14.5
Wm. C. Brown Co., Dubuque, IA	13.0
Ringier American, Olathe, KS	13.0
Bawden Printing, Eldridge, IA	12.0
Walsworth Publishing, Marceline, MO	10.5
Nazarene Publishing, Kansas City, MO	5.5
DIRECTORY — Total 119.5	
Moore Business Forms, St. Louis Park, MN	70.0
Maxwell Communications, St. Paul, MN	22.0
American Spirit Graphics, Minneapolis, MN	12.5
Downey Printing, Des Moines, IA	10.0
Corley Printing Co., Earth City, MO	3.5
Merrill Corp., St. Paul, MN	1.5
PREPRESS — Total 115.1	
Merrill Corp., St. Paul, MN	22.0
Color Associates, St. Louis, MO	20.0
Spectrum, Inc., Minneapolis, MN	15.0
Photo Mechanical Services, Minneapolis, MN	12.8
Colorhouse, Inc., Minneapolis, MN	12.0
Lithocraft Studios, Hazelwood, MO	10.0
The Clarinda Co., Clarinda, IA	9.0
Lewin Bookbinding, Hazelwood, MO	3.5
Walsworth Publishing, Marceline, MO	3.0
Muscle Bound Bindery, Minneapolis, MN	3.0
Sly Litho, Inc., St. Paul, MN	2.8
Fordyce Marketing, Hazelwood, MO	2.0

Figures given for sales are in millions of dollars. Data taken from Printmarkets, Trade & Technology Press, Stamford, Conn.

If you'd like to rent the list of names of people in any of the printing establishments in this section, please contact Jim Long, Direct Mail Services, Cahners Publishing, 249 W. 17th St., N.Y., N.Y. 10011, or call 1-800-537-7930.

One clue as to what happens to them is in the figures for educational attainment. Except for North Dakota and Missouri, the region is ahead of the nation in percentage of high-school graduates. Except for Kansas and Minnesota, it lags behind in college grads. It could well be that a lot of the region's bright young people don't stick around after they leave school.

Educational Attainment

State	High School (12+ years)	College (16+ years)
Nebraska	73.4%	15.5%
Kansas	73.3%	17.0%
Minnesota	73.1%	17.4%
Iowa	71.5%	13.9%
South Dakota	67.9%	14.0%
North Dakota	66.4%	14.8%
Missouri	63.5%	13.9%
U.S. Average	66.5%	16.2%

Income and Bank Deposits

State	Income (Per Capita)	Rank	Bank Deposit Increase 1985–1986, %
Minnesota	$11,186	15	7.8%
Kansas	10,684	20	5.6%
Nebraska	10,546	22	4.0%
Missouri	10,283	27	10.2%
Iowa	10,096	29	3.7%
North Dakota	9,635	34	2.8%
South Dakota	8,553	46	−4.5%
U.S. Average	$10,797		9.0%

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graphic arts monthly®

THE MAGAZINE OF THE PRINTING INDUSTRY

$10.00

Official 1990 Ranking Of Top Printing Companies

Also: New Nashville Sound, Graph Expo Preview

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graphic arts monthly

THE MAGAZINE OF THE PRINTING INDUSTRY

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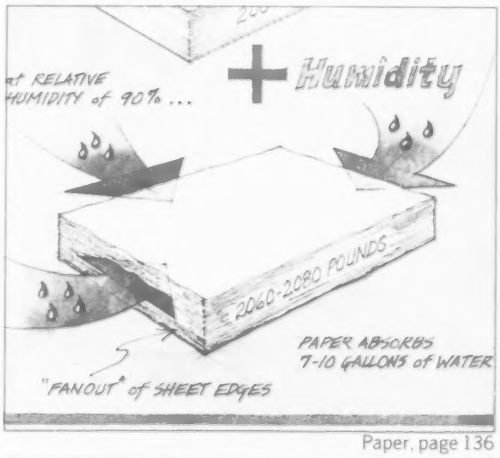

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Price Indexes Show Inflation Slowing, But Not Enough

Recent weakness in the economy has helped slow price inflation. In turn, reduced concern over inflation resulted in lowering interest rates. This slowdown in inflation has not been convincing enough, however, as the Federal Reserve Board has refused to play a role in further easing interest rates.

Consumer prices fell to a 2.8% annual rate in May, following the 7.8% annual growth rate during the first quarter, the highest rate since spring 1982. Year-to-date data rose 4.8% gain above the same period in 1989, slightly below the 5.0% increase in the first five months of 1989.

Further declines in consumer prices can be expected based on progress seen on the wholesale side. The producer price index for finished goods was virtually unchanged in the first half of months of 1989 and is expected to log in at 4.3% for the year. Likewise, the PPI for intermediate goods has fallen from a 4.6% rate of increase in 1989 to a projected 1.5% rise in 1990.

These favorable producer numbers will translate into good news for consumers. Although the consumer price index is expected to rise 4.7% in 1990, look for prices to increase just 3.8% in 1991.

Interest rates have seen slight declines from their peak in early-1989. In particular, the prime rate, registering at 10% for the past four months, is much lower than its peak level of 11.5% a year ago.

Despite the recent quell of inflationary fears, however, the Fed has decided against easing interest rates until there is more evidence of weakness in the economy and lower inflation.

Nonetheless, market rates are still expected to trend downward through the fall of this year. Cahners Economics expects another half point drop in the prime rate by year-end.

The Federal Reserve Board recently revised and rebased the industrial production series to an index of 1987 = 100. The impact on printing and publishing production was quite dramatic. Year-end 1989 levels declined from a previous 9.1% gain over 1988 to a more reasonable 4.8% rise. These trends are more reasonale because they put printing and publishing back in line with overall economic trends, the dominant factor driving activity in this industry. Cahners projects industry output to rise 4.1% this year, followed by a forecast 8.1% gain in 1991.

GENERAL ACTIVITY INDICATORS

				Annual Percent Change			
General Economic Indicators	**Q1/89**	**Q4/89**	**Q1/90**	**1989**	**1990**	**1991**	**1992**
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Making Progress

With a few exceptions, the chief companies on our annual ranking reflect today's business patterns.

For printing companies operating at the very top layer of the industry, fiscal 1989-90 began to reflect a general slowdown in business activity compared to the previous year. In our 1990 ranking of 101 leading firms, about 40 reported gross sales of 10% or more, down from the more than half who reported double-digit gains in last year's ranking.

Also rising was the number of printers reporting either no gain or a negative percentage change in year-over-year sales comparison; the count went from 15 last year to 20 this year. In turn, that leaves about 40 on the main GAM 101 list who reported positive sales gains of 9% or less.

At issue in this situation, of course, is the impact that such a slowdown has on company earnings and profits and the trickle-down effect on reinvestment and capital expansion. All of these indicators are beyond the scope of this study.

However, lest we misinterpret this slowdown for a major business slump, it should be pointed out how solid the North American printing base is and how decent is its fiscal performance as measured in terms of annual sales, particularly when compared to other large industries. Major players in many other fields would be proud to have posted such gains in fiscal 1989-90 over fiscal 1988-89.

Data for virtually all the listings were obtained from the companies themselves, most often in response to a mailed questionnaire, but sometimes obtained by telephone and facsimile machine. In a few cases, sales figures had to be estimated because of accounting practices, nondisclosure policies, or because recent major acquisitions made simple sales-figure comparisons impossible or meaningless.

Readers should note that direct comparisons of company sales figures and performances are not advised; some reasons are obvious—commercial printers include billings for paper while publication printers do not—and others relate to unusual events such as acquisitions or divestitures, reporting methods, and changes in fiscal reporting periods.

Respondents are always asked for figures for the most recent fiscal year. Also, currency conversions were necessary for Canadian firms; for this, a common factor was applied throughout.

Finally, in certain closely integrated operations, it remains impossible to separate printing revenues from other income, which blurs direct comparisons.

Despite these necessary qualifications, the 1990 GAM 101 list stands as the industry's best ranking of major printing firms, given the constraints of time and the privately-held nature of the industry. With ongoing business consolidations, some familiar names no longer appear and a few others asked not to be included.

Special thanks go to Associate Editor Lisa Cross for her tireless efforts in compiling this year's listing. Others heavily involved in the project were Assistant Editor Bridget Kinsella, Editor Roger Ynostroza, and Art Director Karen Lehrer.

If the detachable 1990 GAM 101 double-gatefold form facing this page is missing, you can obtain a copy by sending $5.00—payment with order, please—to Carol Bien, Reprint Services—Cahners Publishing Company, 1350 E. Touhy Ave., Des Plaines, IL 60018.

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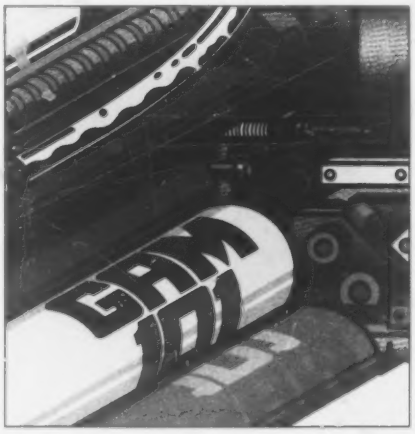
GAM 101
Official Industry Ranking Of The Top Printing Firms

This detachable double-gatefold form contains the 1990 official ranking of the 101 largest printing companies in North America, ranked by sales volume for their most recently completed fiscal year, along with salient information for each firm that's listed.



In addition, there are listings of the top business forms printers, greeting card manufacturers, and color trade shops. These rankings are maintained separately in an effort to avoid distortion of the main list, which concentrates on commercial printers and publication-type printers.

Data for virtually all the listings were obtained from the companies themselves. A few firms projected their sales figures or offered estimates, either because of accounting practices or because of recent acquisitions. For Canadian companies, a single currency exchange rate was applied.

A word of caution: Use of the data to make direct comparisons can be very misleading, even though every effort has been made to exclude nonprinting revenues. The biggest discrepancy: commercial printers generally include billings for paper, while publication printers customarily do not. These qualifications notwithstanding, we believe the GAM 101 ranking is the best available overview of the industry's leaders.

Additional copies of the 1990 GAM 101 are available for $5.00 each; send payment with order to Carol Bien, Reprint Services—Cahners Publishing Company, 1350 E. Touhy Ave., Des Plaines, IL 60018.

RANKING BY EMPLOYEE

1	R. R. Donnelley	26,100
2	Deluxe Corp.	16,948
3	Quebecor Printing	10,700
4	Lawson Mardon	7,500
5	Arcata Graphics	7,200
6	World Color Press	6,400
7	Ringier America	5,800
8	John H. Harland	5,600
9	Sullivan Graphics	5,000
10	Quad/Graphics	4,800
11	Southam Graphics	4,200
12	Clarke American	4,000
13	Banta Corporation	3,650
14	Continental Graphics Holdings	3,600
15	Jostens	3,500
16	Treasure Chest	3,400
17	Trans-Continental	3,208
18	Meredith/Burda	3,200
19	Graphic Industries	3,070
20	Brown Printing	3,000
21	Western Publishing	2,500
22	American Signature	2,480
23	Cadmus Communications	1,900
24	Bowne & Co.	1,700
25	Perry Printing	1,650
26	Engraph	1,330
27	Taylor Publishing	1,300
28	Valassis Inserts	1,204
29	Courier Corp.	1,200
30	Stevens Graphics	1,200
31	Bertelsmann	1,100
32	Instant Web Companies	1,100
33	Judd's	1,050
34	Lehigh Press	1,000
35	Publishers Press	1,000
36	Shorewood Packaging	980
37	Monroe Printing	940
38	Ivy Hill	900
39	Serigraph, Inc.	900
40	Queens Group	870
41	Fleming Packaging	800
42	Hart Graphics	750
43	The Sheridan Press	720
44	Shea Communication	700
45	Merrill Corp.	660
46	Combined Communication	650
47	Graphic Arts Center	650
48	Graphisphere	650
49	Cairn Capital	635
50	K/P Companies	625
51	Mack Printing	622
52	Alford Industries	620
53	Webcrafters	620
54	Moebius Printing	611
55	Waverly Press	610
56	United States Banknote	600
57	Danner Press/Press of Ohio	570
58	Empery Corp.	560
59	Edwards Brothers	550
60	Graftek Press	546
61	Gulf Printing	529
62	Keller-Crescent	520
63	George Rice & Sons	477
64	Spencer Press	470
65	Continental Web Press	450
66	Petty Co.	450
67	Universal Printing	450
68	Wisconsin Color	450
69	Standard Publishing	439
70	Anderson Lithograph	435
71	AGI Incorporated	430
72	Arandell-Schmidt	410
73	Avanti Press	400
74	Henry Wurst	400
75	Williamson Printing	400
76	Noll Printing	394
77	L.P. Thebault Co.	375
78	Riverside Press	375
79	Latham Process	363
80	Century Graphics	350
81	Fort Dearborn Litho	350
82	Meehan-Tooker	350
83	Japs-Olson Co.	343
84	Danbury Printing	339
85	S. Rosenthal & Co.	328
86	Northeast Graphics	325
87	Neenah Printing	309
88	ColorGraphics	300
89	Vernon Company	300
90	John D. Lucas	295
91	Printco	290
92	Lasky Company	277
93	Daniels Printing	260
94	Kukla Press	251
95	Berlin Industries	250
96	Retail Graphics Printing	250
97	Penn Lithographics	230
98	Sandy Alexander	225
99	Editors Press	220
100	Pacific Lithograph	206
101	Sayers Printing	185

BUSINESS FORMS PRINTERS

Rank, Name (Parent), Location	Sales Most Recent Fiscal Year (000)	Change (%)	Employees	CEO
1 **Moore Corporation Limited**[1], Toronto, Ont.	$2,317,849	+ 6	26,360	M.K. Goodrich
2 **Standard Register Company**[1], Dayton, OH	708,876	+ 5	6,271	J.K. Darragh
3 **Uarco, Inc. (Settsu Corp.)**, Barrington, IL	500,000	− 5	4,500	H.L. Koelling
4 **Wallace Computer Services Inc.**[1], Hillside, IL	429,008	+ 12	3,000	T. Dimitriou
5 **American Business Products**[1], Atlanta, GA	387,140	+ 8	4,000	T. Carmody
6 **Reynolds & Reynolds**[1], **Business Forms Div.**, Dayton, OH	348,900	− 1	4,000	R.C. Nevin
7 **Duplex Products Inc.**[1], Sycamore, IL	326,475	+ 9	2,690	C.L. Peterson
8 **New England Business Service**[1], Groton, MA	225,931	+ 12	2,000	R.H. Rhoads
9 **SCM Allied Paper Inc.**, Dayton, OH	147,000	+ 2	700	W.H. Ames
10 **Ennis Business Forms Inc.**[1], Ennis, TX	129,606	+ 1	1,500	K.A. McCrady
11 **Office Electronics**, Itasca, IL	104,497	+ 20	500	M.S. Briggs
12 **Shade Computer Forms Co.**, Green Bay, WI	89,300	+ 16	264	J.L. Kemerling
13 **General Business Forms, Inc.**, Skokie, IL	87,700	+ 4	682	R.S. Kuntz
14 **Transkrit (Maclean Hunter, Inc.)**, Brewster, NY	87,398	+ 5	900	F. Neubauer

THE GAM 101: C

Rank, Name, (Parent Company

1 **R.R. Donnelley & Sons**[1], Ch
2 **Quebecor Printing**[1], Montre
3 **Deluxe Corporation**[1], St. Pa
4 **Lawson Mardon**[1], Mississaug
5 **World Color Press (Kohlberg**
Effingham, IL
6 **Ringier America (Ringier AG,**
7 **Sullivan Graphics**, Brentwood
8 **Banta Corporation**[1], Menasha
9 **Treasure Chest Advertising**, G
10 **Valassis Inserts (Consolidate**
Livonia, MI
11 **Arcata Graphics Company**, Ba
12 **Meredith/Burda**, Des Moines,
13 **Southam Graphics Group**[1], To
14 **Western Publishing**, Racine, W
15 **Quad/Graphics**, Pewaukee, W
16 **Brown Printing (Gruner + Ja**
17 **John H. Harland Company**[1], A
18 **American Signature (ASG Acc**
Memphis, TN
19 **Trans-Continental Printing**[1], (
Group), St.-Laurent, Quebec
20 **Graphic Industries**[1], Atlanta, (
21 **Continental Graphics Holding**
22 **Clarke American**[1] **(M.B. Ame**
23 **Engraph**[1], Atlanta, GA
24 **Bowne & Company**[1], New Yor
25 **Perry Printing (Journal Comm**
Waterloo, WI
26 **Stevens Graphics**, Atlanta, GA
27 **Cadmus Communications**[1], R
28 **Lehigh Press**, Cherry Hill, NJ
29 **Jostens**[1], Minneapolis, MN
30 **Shorewood Packaging**[1], Farm
31 **Graphic Arts Center**, Portland
32 **Judd's Incorporated**, Washing
33 **Bertelsmann Printing & Mfg.**
34 **Graphisphere Corp.**, Des Plai
35 **Queens Group**, Long Island C
36 **Shea Communication**, Louisv
37 **Keller-Crescent**, Evansville, I
38 **Gulf Printing (Southwestern**
39 **George Rice & Sons**, Los Ang
40 **Instant Web Companies**, Cha
41 **Moebius Printing**, Milwaukee
42 **Fleming Packaging**, Peoria, I
43 **Courier Corporation**[1], Lowell
44 **Meehan-Tooker, Inc.**, East Ru
45 **Anderson Lithograph**, Los An
46 **Ivy Hill**[1] **(Time-Warner)**, New
47 **Taylor Publishing (Insilco)**, D
48 **Alford Industries (Kane Indus**
Park, NJ
49 **Arandell-Schmidt (Arandell**
Falls, WI

FICIAL RANKING

Location	Sales Most Recent Fiscal Year (000)	Sales Previous Fiscal Year (000)	Change (%)	Employees	Sales Per Employee	Sites	Press Units: Sheetfed, Web Offset, Gravure, Other	Primary Products	CEO	Years in Business
ago, IL	$3,122,331	$2,878,432	+ 8	26,100	$119,629	34	*	COM	J.R. Walter	126
Quebec	1,454,857**	647,839	+ 124	10,700	135,968	58	386,686,334,37[2]	COM, BK, PUB	J. Neveu	1
, MN	1,315,828	1,195,971	+ 10	16,948	77,639	79	*	SPC	H.V. Haverty	75
a, Ont	853,849**	950,392	− 10	7,500	113,847	51	*	COM,SPC	L.G. Tapp	108
Kravis Roberts & Co.),										
	686,098	654,518	+ 5	6,400	107,203	8	0,525,197,12[2]	PUB	J.A. Dawson	87
Zurich), Itasca, IL	665,000	610,000	+ 9	5,800	114,655	12	*	PUB	E.C. Nytko	97
, TN	650,000	575,000	+ 13	5,000	130,000	15	12,92,0,60[3]	BK,INS	J.T. Sullivan	2
, WI	568,000	526,000	+ 8	3,650	155,616	11	*	COM,PUB,INS	C.W. Aurand Jr.	89
lendora, CA	550,000	540,000	+ 2	3,400	161,765	14	*	COM,PUB,INS	S.G. Scheller	23
d Press U.S.),										
	524,000	400,000	+ 31	1,204	435,216	3	5,61,0	INS	D.A. Brandon	21
itimore, MD	523,000	516,000	+ 1	7,200	72,639	10	*	COM,BK,PUB	E.L. Scarff	85
IA	502,000	453,000	+ 11	3,200	156,875	7	0,50,164	COM	W. Voss	21
ronto, Ont	501,430	472,477	+ 6	4,200	119,388	15	*	COM,INS,PUB	M.A. Quinn	113
WI	410,000	470,000	− 13	2,500	164,000	4	52,26,0,10[2]	COM,PUB	W.O. Nahikian	83
I	400,000	350,000	+ 14	4,800	83,333	5	0,156,20	PUB	H.V. Quadracci	19
hr), Waseca, MN	383,000	365,000	+ 5	3,000	127,666	4	0,241,30	PUB,CAT,INS	J.K. Rifenbergh	33
Atlanta, GA	344,700	333,300	+ 3	5,600	61,554	43	*	SPC	J.W. Robinson	67
quisition Corp.),										
	337,149	315,410	+ 7	2,480	135,947	6	22,204,0	PUB	T.A. Tevis	3
(GTC Transcontinental										
	313,564	278,990	+ 12	3,208	97,744	12	295	COM	R. Marcoux	14
GA	310,330	270,212	+ 15	3,070	101,085	40	350,208,0,36[2]	COM	M.C. Pope III	20
s, Los Angeles, CA	303,000	291,000	+ 4	3,600	84,170	12	*	COM,BK	C.F. Bourland	2
rica), San Antonio, TX	260,000**	N.A.	N.A.	4,000	65,000	49	*	SPC	J.E. Coln	116
	203,000	150,600	+ 35	1,330	152,632	8	*	SPC	L. Benatar	57
k, NY	189,577	187,826	+ 1	1,700	111,520	20	*	FIN	R.H. Koontz	215
nunications),										
	178,900	161,600	+ 11	1,650	108,424	6	6,22,4	COM	R.L. Perry	59
A	173,000	155,000	+ 12	1,200	144,167	5	44,30,0,4[2]	DIR	H.M. Inman	93
ichmond, VA	168,000**	160,800	+ 4	1,900	88,420	10	109,46,0,5[2]	COM,PUB	W. Stettinius	6
	161,400	153,600	+ 5	1,000	161,400	6	43,67,0,3[4]	COM	J.D. DePaul	66
	153,000	125,000	+ 25	3,500	61,200	6	138,0,0	BK	H.W. Lurton	93
ingdale, NY	139,300	127,100	+ 10	980	142,143	6	*	SPC	P.B. Shore	24
, OR	130,000**	119,000	+ 9	650	200,000	1	38,33,0	COM	F.M. Stammers	95
gton, D.C.	114,100	108,100	+ 6	1,050	108,667	3	8,66,0	BK,PUB	T.A. Manning	122
Corp., Berryville, VA	114,000	95,000	+ 20	1,100	103,636	4	57,33,0,1[2]	BK	R. Hampp	3
nes, IL	110,000	96,000	+ 15	650	169,230	3	41,27,0	COM	G.R. Dorn	26
ty, NY	110,000	102,000	+ 8	870	126,437	4	72,22,0,2[3]	SPC	E. Kaltman	58
ville, KY	106,918	120,000	− 11	700	152,740	3	0,40,39	COM,PUB,CAT	M.D. Shea	2
N	106,541	110,254	− 3	520	204,887	1	40,0,0,9[2],5[12]	COM, SPC	T.M. Smythe	105
Bell), Houston, TX	105,000	75,000	+ 40	529	198,487	4	27,44,0,3[2]	COM	R.D. Cashman	74
geles, CA	103,287	96,483	+ 7	477	216,535	1	30,24,0	COM	E. Grossberg	111
nhassen, MN	98,000**	90,000	+ 9	1,100	89,090	4	0,62,0	COM,SPC	J. Carlson	21
, WI	98,000	75,000	+ 31	611	160,393	3	19,50,0	COM	M.C. McDonough	79
L	95,112	97,590	− 3	800	118,890	11	67,13,9,13[2],34[12]	SPC	T.J. Fleming	56
, MA	95,951	81,769	+ 17	1,200	79,960	5	10,34,0	BK	J.F. Conway Jr.	166
therford, NJ	95,000	80,000	+ 19	350	271,430	3	35,43,0	COM	M.D. Voss	4
geles, CA	93,000	90,000	+ 3	435	213,790	1	36,24,0	COM	G.T. Parana	39
York, NY	93,000	71,000	+ 31	900	103,333	4	113,0,0	COM,SPC	E. Kern	76
allas, TX	87,800	86,800	+ 1	1,300	67,540	4	58,0,0	BK	F.P. Perliski	51
tries), Ridgefield										
	86,389	87,277	− 1	620	139,340	4	36,0,53,10[2],38[12]	SPC	D. Moir	88
Corp.), Menomonee										
	85,407	73,505	+ 16	410	208,310	1	0,24,0	COM	F.E. Treis	68

THE GAM 101: OFFICIAL RANKING

Rank, Name, (Parent Company), Location	Sales Most Recent Fiscal Year (000)	Sales Previous Fiscal Year (000)	Change (%)	Employees	Sales Per Employee	Sites	Press Units: Sheetfed, Web Offset, Gravure, Other	Primar Produc
50 Empery Corporation (Ferguson), Paoli, PA	85,000	72,000	+ 18	560	151,790	7	2,60,0,120[2],62[12]	SPC
51 Continental Web Press, Itasca, IL	75,000	65,000	+ 15	450	166,670	1	0,44,0	COM
52 Monroe Printing Company, East Stroudsburg, PA	72,800	70,500	+ 3	940	77,450	4	46,53,0	PUB
53 Publishers Press, Inc. (Publishers Printing), Louisville, KY	$72,000	$63,000	+ 14	1,000	$ 72,000	2	16,58,0	PUB
54 Hart Graphics, Austin, TX	71,540**	58,152	+ 23	750	95,390	3	50,36,0,17[8]	COM
55 Petty Co., Inc., Effingham, IL	71,000	65,000	+ 9	450	157,780	2	1,63,0	COM
56 Retail Graphics Printing (RGP Corp.), Dallas, TX	70,000**	54,000	+ 30	250	280,000	2	0,40,0	INS
57 Merrill Corporation[1], St. Paul, MN	69,022	63,394	+ 9	660	104,580	15	26,21,0,1[2]	FIN,SPC
58 Danner Press/The Press of Ohio, Canton, OH	64,000	63,300	+ 1	570	112,280	2	11,41,0	PUB,CA
59 United States Banknote, New York, NY	60,000	60,000	0	600	100,000	3	45,18,5,24[2],9[2]	SPC
60 Webcrafters, Madison, WI	60,000	62,000	– 3	620	96,770	2	0,54,0	BK
61 Combined Communication, Lisle, IL	58,300	55,586	+ 5	650	89,690	2	6,40,0	PUB
62 Berlin Industries (Smith Investment), Addison, IL	58,000	58,000	0	250	232,000	2	0,44,0	COM
63 L.P. Thebault Company, Parsippany, NJ	58,000**	54,000	+ 7	375	154,670	1	30,12,0	COM
64 Vernon Company, Newton, IA	57,000	57,000	0	300	190,000	3	7,0,0,5[2]	SPC
65 Serigraph, Inc., West Bend, WI	56,000	51,000	+ 10	900	62,220	3	7,0,0,33[4]	SPC
66 Lasky Company, Milburn, NJ	55,000	53,000	+ 4	277	198,560	1	22,23,0	COM
67 Spencer Press, Wells, ME	55,000**	53,200	+ 3	470	117,020	1	0,27,0	CAT
68 Mack Printing, Easton, PA	54,433	57,216	– 5	622	87,510	1	15,29,0	PUB
69 Cairn Capital Inc., Don Mills, Ont.	53,059**	54,309	– 2	535	83,560	7	*	COM
70 K/P Companies, Berkeley, CA	52,518	54,767	– 4	625	84,030	18	*	COM
71 Edwards Brothers, Ann Arbor, MI	52,000**	46,000	+ 13	550	94,500	2	*	BK
72 Henry Wurst Inc., North Kansas City, MO	52,000	47,000	+ 11	400	130,000	2	0,35,0	COM
73 The Sheridan Press (Sheridan Group), Hanover, PA	51,700	45,700	+ 13	720	71,810	2	26,0,0	PUB
74 Avanti Press, Miami, FL	51,000	42,500	+ 20	400	127,500	1	0,18,0	COM,CA
75 ColorGraphics, Los Angeles, CA	51,000	52,000	– 2	300	170,000	3	26,23,0	COM
76 Fort Dearborn Lithographic Co., Chicago, IL	50,508	48,000	+ 5	350	144,310	1	44,0,0	COM,SP
77 Century Graphics, Metairie, LA	50,000	44,217	+ 13	350	142,860	2	0,24,0	INS
78 Williamson Printing, Dallas, TX	50,000	40,000	+ 25	400	125,000	2	35,24,0,6[2]	COM
79 Printco, Greenville, MI	49,018	44,207	+ 11	290	169,030	2	0,40,0	INS
80 Danbury Printing & Litho, Danbury, CT	48,000	48,200	0	339	141,590	1	17,36,0,1[2]	COM
81 Northeast Graphics, North Haven, CT	46,000	35,000	+ 31	325	141,540	1	17,43,0	INS
82 Noll Printing (Our Sunday Visitor), Huntington, IN	45,200	45,137	0	394	114,720	1	0,39,0	CAT
83 Waverly Press[1] (Waverly, Inc.), Baltimore, MD	44,710	45,315	– 1	610	73,300	2	27,12,0	PUB
84 Kukla Press, Inc., Elk Grove Village, IL	44,000	40,000	+ 10	251	175,300	2	0,50,0	COM
85 Universal Printing, St. Louis, MO	44,000	42,000	+ 5	450	97,780	2	38,13,0,7[2]	COM
86 Graftek Press[1] (Devon Group), Woodstock, IL	43,296	40,060	+ 8	546	79,300	3	16,52,0	PUB
87 Sandy Alexander[1] (Mickelberry Corp.), Clifton, NJ	43,252	42,856	+ 1	225	192,230	1	25,16,0	COM
88 The Riverside Press, Dallas, TX	42,000	40,800	+ 3	375	112,000	4	38,6,0,6[2]	COM,SP
89 Japs-Olson Company, Minneapolis, MN	40,650	34,600	+ 17	343	118,510	2	54,113,0,3[2],26[1]	COM
90 AGI Incorporated, Melrose Park, IL	40,000	33,000	+ 21	430	93,020	1	*	COM,SP
91 Pacific Lithograph, San Francisco, CA	40,000	36,500	+ 10	206	194,170	1	31,24,0	COM,SP
92 Wisconsin Color Press, Milwaukee, WI	40,000	40,000	0	450	88,890	1	4,41,0	PUB
93 S. Rosenthal & Co., Cincinnati, OH	36,400	33,900	+ 7	328	110,980	1	10,32,0	PUB,CA
94 Daniels Printing, Everett, MA	36,000	37,200	– 3	260	138,460	1	38,4,0,5[2]	COM,FIN
95 Latham Process Corp.[1], New York, NY	36,000**	34,233	+ 3	363	99,170	2	12,32,0	COM
96 Penn Lithographics (JSJ Corp.), Cerritos, CA	35,000**	31,515	+ 11	230	152,170	1	21,22,0	COM
97 Editors Press (Kiplinger), Hyattsville, MD	34,000	33,000	+ 3	220	154,550	1	4,25,0	PUB
98 Sayers Printing Company (Graphic Innovators), St. Louis, MO	33,800	30,000	+ 13	185	182,700	2	18,22,0	COM
99 Standard Publishing[1] (Standex), Cincinnati, OH	33,786	37,789	– 11	439	76,960	1	8,12,0	COM
100 John D. Lucas Printing, Baltimore, MD	33,300	32,300	+ 3	295	112,880	1	23,22,0,2[2]	COM
101 Neenah Printing (Menasha Corp.), Neenah, WI	32,020	30,250	+ 6	309	103,620	3	41,21,0,4[2],16[3]	COM

CEO	Years in Business
A.J. Clegg	11
K.W. Field	17
R.D. Hughes	20
F.E. Simon	124
W.L. Hart	80
G.A. Whaling	15
H.S. Goldman	7
J.W. Castro	22
D.H. Bracken	41
M. Weissman	120
J.J. Frautschi	100
R. Sanderson	44
F.E. Schmitt	54
J.B. Thebault	36
W.F. Vernon	88
J. Torinus	41
R.H. Barnhard	73
J.E. Spenlinhauer III	50
P.F. Mack	89
D.M. Alloway	45
J.W. Knapp	24
M.H. Edwards	97
J.C. Wurst	53
R.C. Sheridan	75
J.R. Arriola	25
C.N. Madison	37
T. Adler	66
C.J. Eberts Sr	34
J.B. Williamson	106
J.A. Pentecost	21
M. Previdi	44
S. Bortner	2
R. Ciavola	12
W.M. Passano Jr.	100
S.J. Kukla Jr.	26
R.A. Ebel	51
S.B. Pearlman	23
F. Stillo	27
R. Lane	100
R.E. Murphy	83
R. Block	22
E.J. Flynn II	42
F. Cappetta	62
T.N. Rosenthal	122
L.S. Daniels	110
R. Gombach	50
D.C. Bishop	56
K. King	39
H.M. Sayers	78
F.D. Mosher	124
M.A. Krieger III	160
W. Drew	90

GREETING CARD PRINTERS

Rank, Name, Location	Sales Most Recent Fiscal Year (000)	Change (%)	Employees	CEO
1 **Hallmark Cards**, Kansas City, MO	$2,500,000	+ 9	21,500	I.O. Hockaday
2 **American Greetings**[1], Cleveland, OH	1,380,984	+ 8	20,500	M. Weiss
3 **Gibson Greetings**, Cincinnati, OH	465,000	+ 15	4,500	B.J. Sottile

COLOR TRADE SHOPS

Rank, Name, Location	Sales Most Recent Fiscal Year (000)	Change (%)	Equipment: Scanners	Equipment: Color Pagination Systems	CEO
1 **Applied Graphics Technologies**, New York, NY	$111,000**	+ 11	19	18	F. Drasner/ S. Server/ P. Faucetta
2 **Techtron Imaging Network**[1] (Wace Group, London), Chicago, IL	106,700	+ 16	31	35	J.J. Collins
3 **Jannock Imaging**, Toronto, Ont.	94,138	+ 24	6	10	W.H. Batten/ J. Lane
4 **Parkway USA**[1] (Parkway, London), New York, NY	79,000**	+ 5	9**	5	P. Ross
5 **Black Dot Graphics**[1] (Devon Group), Crystal Lake, IL	76,558	0	6	8	J.W. Dinzole
6 **American Color** (Sullivan Graphics), Phoenix, AZ	68,000**	+ 24	28	16	D. Brazell
7 **Schawk Companies**, Des Plaines, IL	62,200	+ 12	17	11	C.W. Schawk
8 **Lanman Companies**, Washington, DC	45,000**	+ 53	12	4	B.B. Cunningham
9 **Enteron Group**, Chicago, IL	44,000	+ 10	6	3	J.J. Reilly
10 **Color Associates**, St. Louis, MO	28,000	+ 27	3	3	C.W. Bauer
11 **Magna Graphic Inc.**, Lexington, KY	22,800	+ 30	5	3	K. Engle
12 **Kwik International Color**, New York, NY	20,500	+ 8	2	2	R.J. Sirota
13 **H&S Reliance Ltd.**, Toronto, Ont.	19,255	+ 13	2	3	J.A. Davidson
14 **Phototype Color Graphics**, Pennsauken, NJ	17,900	− 1	3	4	J. Rubin
15 **Blanks Color Imaging**, Dallas, TX	17,679	+ 6	5	0	L. Blanks
16 **NEC Inc.**, Nashville, TN	17,600	+ 20	3	4	R.W. Luckett
17 **Lincoln Graphics**, Cherry Hill, NJ	17,300	− 12	5	2	R.C. Drum
18 **Herzig Sommerville**, Toronto, Ont.	17,125	− 1	5	7	E. Herzig

[Editor's Note: Ongoing company consolidations, the merging of international operations, and the changing nature of the graphic arts prepress business makes it impossible to compile comparative information for this listing. In several cases, the companies cannot isolate revenues for color separation services only. Thus, revenues may also include typesetting, color retouching, custom photo processing, electronic prepress services, and printing.]

EXPLANATION OF ABBREVIATIONS

COM	Commercial Printing	SPC	Specialty
PUB	Publications	INS	Inserts
BK	Books	FIN	Financial Printing
CAT	Catalogs	DIR	Directory Printing

FOOTNOTES

1 Publicly held
2 Letterpress
3 Flexo press
4 Screen press
5 Diecutting
6 Gold leaf press
7 Sheetfed intaglio
8 Forms press
9 Coaster press
10 Cameron belt press
11 Coater
12 Specialty press
* Information not available
** Estimated

graphic
arts
monthly

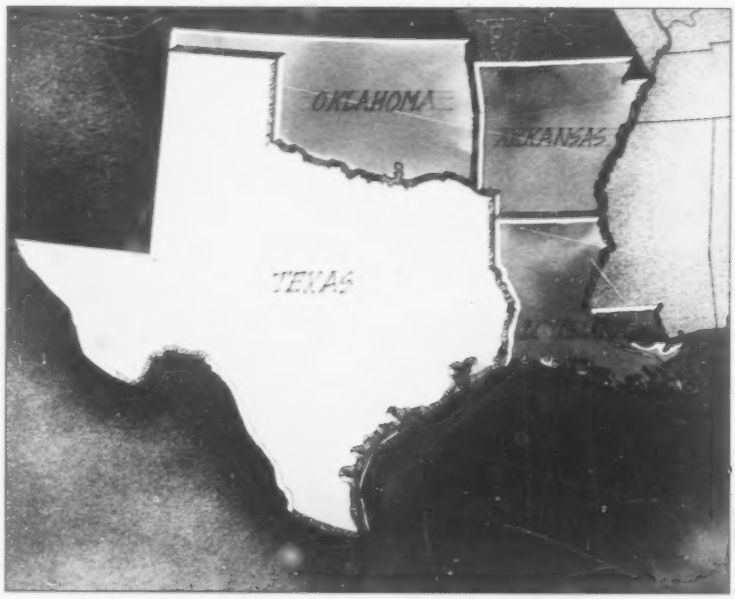
West South Central Region

It seems a bit unfair to the other three states in this region, but what we really mean when we talk about this part of the country is "Texas and surrounding states". Texas represents about 60% of the region, measured either by land mass or population; it represents about 75% of its printing industry. The others, in order of their share of regional printing volume, are Oklahoma (10%), Louisiana (8.7%), and Arkansas (7.2%).

There was a time, eight or nine years ago, when everybody thought this region was going to be the economic powerhouse of the nation by now. That's because this is the oil patch, and when the price of oil went to more than $30 a barrel, wells that had been plugged for years as money-losers suddenly became very, very profitable.

Then the bottom fell out of the oil business. *Then* it turned out that the local financial community had been playing demolition derby, using banks instead of old cars, and the bottom fell out of just about everything else. That golden age when real estate appreciated 30% a year and the biggest Rolls-Royce dealership in the world was in Midland, Texas, overnight became a rapidly fading memory.

There's a lesson here, but I doubt that anybody's learned it. The market for restraint is, well, sluggish down there, to put it nicely. Meanwhile, over most of the region things are picking up.



Jana Brenning

Not that any of these states is really rich; the behavior of moneyed Texans is of course legendary, but they're balanced by a lot of the nonrich. All four states are below the national average for per-capita income (Louisiana and Arkansas are far below it). Since much of the imploded S&L industry was down here, changes in bank deposits don't tell us much.

All in all, prospects seem pretty good for this region. They're gaining in population, their economies are diversifying, and there's a general sense that the worst is over. The food's awful good, too.

Data for these reports come primarily from Printing Industries of America, the National Association of Printers and Lithographers, the U.S. Bureau of the Census, Trade and Technology Press of Stamford, Conn. (the publishers of *Printmarkets*, a highly useful source of industry data) and Graphic Arts Monthly's own database.

Reprints of this installation of the Geography of Print may be ordered from Holly Hoffman, GRAPHIC ARTS MONTHLY, 249 W. 17th St., New York, NY 10011.

By Peter Johnston
Special Projects Manager

Regional Overview

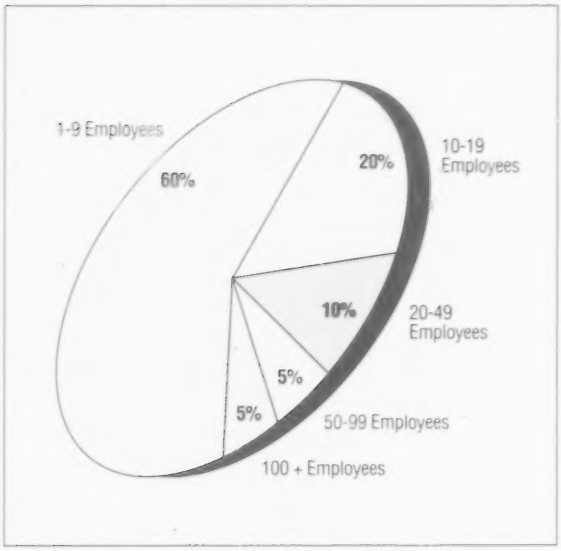
Note that these figures, taken from the GAM database, reflect the universe of printers in its widest sense. In most of the data on the next three pages, a smaller—though still very large—universe of printers will be used. This is because we will be concerned with the way the printing industry in the West South Central region is divided up in terms of markets. This requires us to exclude newspapers, in-plant printers, and certain other plants. These folks, while clearly printers, are not *economically measurable* as printers.

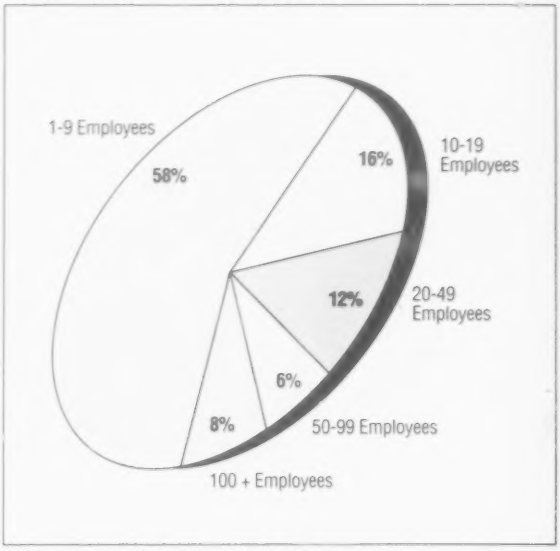
West South Central, Plants by Employee Count

Size	# of Plants	% of Region
1–9 Employees	2,174	60%
10–19 Employees	601	20%
20–49 Employees	371	10%
50–99 Employees	198	5%
100 + Employees	199	5%
TOTAL	**3,543**	**100%**

United States, Plants by Employee Count

Size	# of Plants	% of Total
1–9 Employees	29,815	58%
10–19 Employees	8,381	16%
20–49 Employees	6,428	12%
50–99 Employees	3,147	6%
100 + Employees	3,846	8%
TOTAL	**51,617**	**100%**





Charts and graphs by Lisa Hilgers

Plants by Function

Overall, the West South Central region accounts for about 7.5% of the total U.S. industry, as measured by value of shipments (gross sales). There is more business form activity in the region than that, and fewer converters and trade printers.

Function	# of Plants	% of U.S. Total
Commercial	1,952	7.5%
Newspaper (w/ Commercial)	138	8.5%
Newspaper (w/o Commercial)	182	8.0%
Book & Pub	138	5.4%
Business Forms	72	9.2%
Converters	82	4.4%
Noncommercial	466	6.1%
Trade	194	4.5%
Quick Printers	319	7.0%

Equipment Distribution

Equipment	Sites in Region	% of U.S. Total
Color Scanners	146	5.6%
Sheetfed Presses	2,649	11.2%
Heatset Web Offset Presses	236	6.2%
Folders	2,282	7.4%

These figures represent not pieces of equipment but sites where that equipment can be found. The high number for sheetfed presses means that they are divided up among a larger number of smaller shops than the national norm. Otherwise, equipment distribution corresponds very closely to the distribution of gross printing sales in the region. Note that this is not always the case, especially in regions containing a disproportionate number of very large sites.

Commercial Printing

Value of Shipments

Because of their relative populations, the printing industry in these states comes in two sizes: large (Texas) and small (the others). Texas, in fact, has close to three-fourths of the region's printing revenues. Size aside, unlike the north-south dispersion we've seen in other regions, these states are economically fairly similar. The differences among them are differences in degree, not in kind.

State	Sales	%
Texas	3,800	74.1%
Oklahoma	516	10.0%
Louisiana	446	8.7%
Arkansas	368	7.2%
TOTAL	5,130	100%

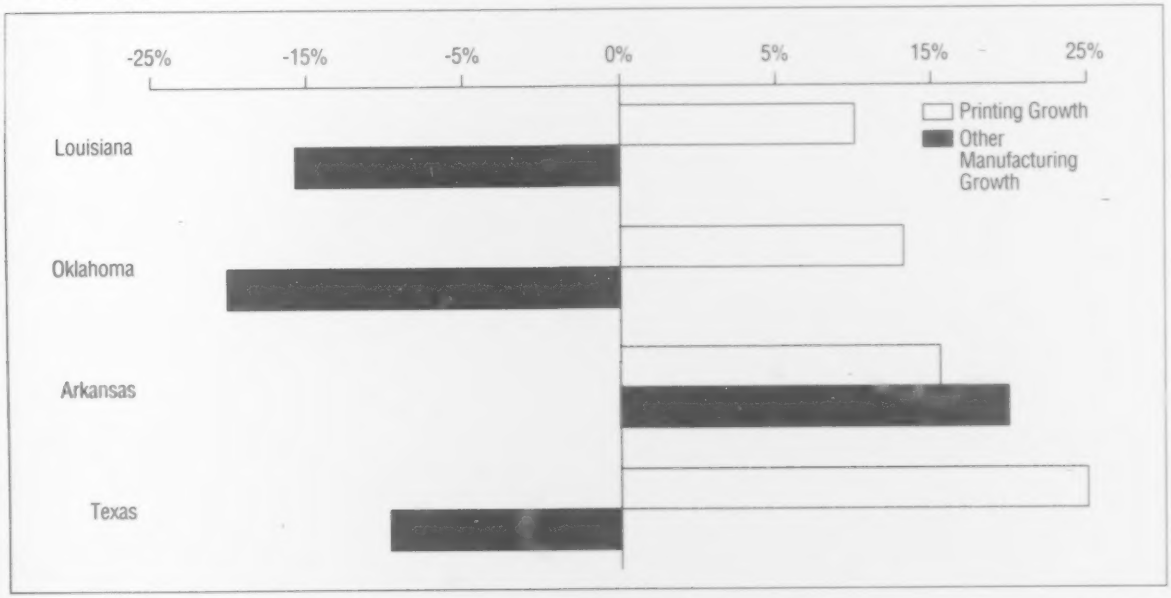
Printing Sites

State	Sites	%
Texas	2,219	69.4%
Oklahoma	418	13.1%
Louisiana	372	11.7%
Arkansas	185	5.8%
TOTAL	3,194	100%

The distribution of printing sites, not surprisingly, closely reflects the distribution of sales volume (value of shipments). Texas has a larger share of sales than of sites, meaning that on average it has somewhat larger printers. That's because it has large cities. Forget the wide-open-spaces mythology. Texas is now an urban state; 80% of its population lives in metropolitan areas, vs. 60% for Louisiana, 55% for Oklahoma, and only about 38% for Arkansas.

Printing industry employment has increased in all four states; in Texas it's up 25% (measured 1982-1988). Arkansas has even seen a 20% increase in non-printing manufacturing for the period, close to a national record. Arkansas was the least oil-dependent of these states; it is also the poorest.

Printing Employment



Industry employment, by state, is almost exactly proportional to value of shipments. Texas again is the overwhelming leader in the region, followed by Oklahoma, Louisiana, and Arkansas in one clump. Looking at the data on industry employment growth, we see that Louisiana was hardest hit by the oil bust and has recovered the most slowly.

State	Employees
Texas	43,051
Oklahoma	5,527
Louisiana	4,983
Arkansas	3,935
TOTAL	57,496

Leading Printers in Major Markets

Company	Location	Sales
BUSINESS FORMS PRINTERS		**Total 449.2**
Bowater Computer Forms, Inc.	Plano, TX	137.0
Ennis Business Forms, Inc.	Ennis, TX	113.0
Texas Stock Tab	Coppell, TX	95.0
Norick Brothers, Inc.	Oklahoma City, OK	24.0
Hart Graphics, Inc.	Austin, TX	17.0
Central States Business Forms	Dewey, OK	13.2
Royal Business Forms, Inc.	Arlington, TX	12.0
Castle Multiforms, Inc.	Shreveport, LA	12.0
International Business Forms	Little Rock, AR	11.0
All-States Business Products	Carrollton, TX	8.0
All-States Business Products	Grand Prairie, TX	7.0
INSERT PRINTERS		**Total 285.5**
Retail Graphics Printing	Dallas, TX	41.5
Century Graphics Corporation	Metarie, LA	34.0
Newspaper Enterprises Inc.	Dallas, TX	26.5
Oklahoma Graphics	Oklahoma City, OK	25.0
GBP Industries	Lufkin, TX	25.0
World Color Press, Inc.	Stillwater, OK	20.0
Treasure Chest Advertising	San Antonio, TX	20.0
Treasure Chest Advertising	Grand Prairie, TX	20.0
Adplex, Inc.	Houston, TX	18.0
Greater Houston Publishers	Houston, TX	14.5
Nortex Press	Wichita Falls, TX	14.0
Maxwell Communications	Dallas, TX	10.0
The Printing Center	Fort Worth, TX	9.0
Hart Graphics, Inc.	Austin, TX	8.0
COMMERCIAL/SPECIALTY PRINTERS		**Total 260.0**
Clarke Checks	San Antonio, TX	53.0
Taylor Publishing Co.	Dallas, TX	40.5
The Riverside Press, Inc.	Dallas, TX	22.5
Williamson Printing	Dallas, TX	16.5
Weldon Williams & Lick, Inc.	Fort Smith, AR	16.0
Optigraphics Corporation	Grand Prairie, TX	16.0
Horticultural Printers, Inc.	Mesquite, TX	14.0
Texas Stock Tab	Coppell, TX	10.0
Heritage Press, Inc.	Dallas, TX	10.0
International Graphics	Little Rock, AR	10.0
Creative Printing	Little Rock, AR	8.0
Hart Graphics, Inc.	Austin, TX	8.0
American Printers	San Antonio, TX	7.0
Hurst Printing	Dallas, TX	6.0
Wetmore & Company	Houston, TX	5.0
Charles P. Young Company	Houston, TX	5.0
Blanks Engraving Company	Dallas, TX	5.0
F. L. Motheral Printing	Ft. Worth, TX	3.0
Norick Brothers, Inc.	Oklahoma City, OK	2.5
Harvey Press, Inc.	New Orleans, LA	2.0
MAGAZINE PRINTERS		**Total 257.3**
World Color Press, Inc.	Stillwater, OK	45.0
Maxwell Communications	Dallas, TX	40.0
Ringier America, Inc.	Jonesboro, AR	30.0
GBP Industries	Lufkin, TX	25.0
American Signature Graphics	Dallas, TX	21.8
Gulf Printing Company	Houston, TX	20.0
The Lehigh Press, Inc.	Dallas, TX	15.0
Democrat Ptg. & Litho	Little Rock, AR	13.0
PennWell Printing Company	Tulsa, OK	13.0
The Lehigh Press, Inc.	Carrollton, TX	12.0
Treasure Chest Advertising	San Antonio, TX	10.0
Hart Graphics	Austin, TX	5.0

Demographics in West South Central

Population and Migration

State	Population	Rank	Migration (See text.)	Change (%, 80-86)
Texas	16,685,000	3	1,331,000	17.3
Louisiana	4,501,000	18	8,000	7.0
Oklahoma	3,305,000	25	120,000	9.2
Arkansas	2,372,000	33	10,000	3.8
TOTAL	**26,863,000**		**1,469,000**	

Potential Labor Pool

State	Age 15-24 (% Population)	Unemployment Rate (%)
Louisiana	18.5%	13.1
Texas	17.8%	8.9
Oklahoma	16.8%	8.2
Arkansas	15.8%	8.7

The figure for migration is a particularly important one; it shows what is really happening to a state's population once the birth and death rate are factored out. This figure represents the number of people who have moved in or out from or to somewhere else. Unlike other regions, the West South Central has a positive migration figure.

There are two important factors in the unusually high migration figure for Texas. One factor is the population that moved down to share in the boom and stayed to share in the bust. (At least it was warm, and they were no worse off than they'd been before.) The other factor is that Texas, with more than 1,000 miles of southern border, receives large numbers of immigrants from Mexico and Central America, many of whom remain in the state.

All four of these states have among their population a sizable pool of potential labor, having both large contingents in the 18 to 24-year-old age bracket and unemployment rates above the national average. High unemployment doesn't sound like a plus, but in some ways it is. In

WEST SOUTH CENTRAL

Tables of leading printers given in order of overall market size. This will vary from region to region.

Company	Location	Sales
Colorgraphics	Tulsa, OK	4.5
F.L. Motheral Printing	Ft. Worth, TX	3.0
DIRECTORY PRINTERS		**Total 129.5**
GTE Directories Corporation	DFW Airport, TX	85.0
Gulf Printing Company	Houston, TX	31.0
The Printing Center	Fort Worth, TX	13.5
CATALOG PRINTERS		**Total 116.0**
Ringier America, Inc	Jonesboro, AR	35.0
Oklahoma Graphics	Oklahoma City, OK	17.0
The Lehigh Press, Inc.	Dallas, TX	15.0
Hart Graphics, Inc.	Austin, TX	7.0
Colorgraphics	Tulsa, OK	5.5
PennWell Printing Company	Tulsa, OK	5.0
American Signature Graphics	Dallas TX	5.0
GTE Directories Corporation	DFW Airport, TX	5.0
Gulf Printing Company	Houston, TX	5.0
Maxwell Communications	Dallas, TX	5.0
F.L. Motheral Printing	Ft. Worth, TX	5.0
Royer & Schutts	Fort Worth, TX	3.5
The Lehigh Press, Inc.	Carrollton, TX	3.0
ADVERTISING PRINTERS		**Total 98.0**
The Riverside Press, Inc.	Dallas, TX	18.0
Williamson Printing	Dallas, TX	14.0
Royer & Schutts	Fort Worth, TX	9.0
Bennett Printing	Dallas, TX	8.5
Wetmore & Company	Houston, TX	8.0
Heritage Press, Inc.	Dallas, TX	7.0
F.L. Motheral Printing	Ft. Worth, TX	7.0
Hurst Printing	Dallas, TX	6.5
American Printers	San Antonio, TX	6.0
Harvey Press, Inc.	New Orleans, LA	5.0
International Graphics	Little Rock, AR	5.0
Democrat Ptg. & Litho	Little Rock, AR	4.0
FINANCIAL/LEGAL PRINTERS		**Total 76.0**
Clarke Checks	San Antonio, TX	60.0
Charles P. Young Company	Houston, TX	10.0
Norick Brothers, Inc.	Oklahoma City, OK	6.0
DIRECT MAIL PRINTERS		**Total 37.0**
Adplex, Inc.	Houston, TX	12.0
Century Graphics Corporation	Metarie, LA	10.0
Oklahoma Graphics	Oklahoma City, OK	8.0
Williamson Printing	Dallas, TX	7.0
PREPRESS		**Total 31.0**
Wilson Engraving Company, Inc.	Dallas, TX	14.5
Blanks Engraving Company	Dallas, TX	12.0
Williamson Printing	Dallas, TX	2.5
Hart Graphics, Inc.	Austin, TX	2.0
LABEL/WRAPPER PRINTERS		**Total 19.0**
MPI Label Systems	Grand Prairie, TX	10.0
Graphic Arts	Ft. Worth, TX	9.0

Figures given for sales are in millions of dollars. Data taken from Printmarkets, Trade & Technology Press, Stamford, Conn.

If you'd like to rent the list of names of people in any of the printing establishments in this section, please contact Jim Long, Direct Mail Services, Cahners Publishing, 249 W. 17th St., N.Y., N.Y. 10011, or call 1-800-537-7930.

Educational Attainment

State	High School (12+ years)	College (16+ years)
Oklahoma	66.0%	15.1%
Texas	62.6%	16.9%
Louisiana	57.7%	13.9%
Arkansas	55.5%	10.8%

Income and Bank Deposits

State	Income (Per Capita)	Rank	Bank Deposit Increase 1985–1986, %
Texas	$10,373	23	3.1%
Oklahoma	9,754	33	−8.7%
Louisiana	8,836	40	3.4%
Arkansas	8,389	48	3.1%
U.S. Average	10,797		9.0%

the East there are large printing plants with workforces over an average age of 35 located in counties with unemployment rates of less than 2%. It may be tough to train untrained workers, but it's not as tough as trying to hire workers that don't exist.

As to educational attainment, these states hover somewhat below the national norms. Oklahoma is slightly ahead in percentage of high-school graduates; in college graduates, the states fall in the same order they do for most things. Texas, at 16.9%, is slightly above the national average, in fact, which won't surprise anyone who's ever tried to find a parking place in Austin. Some years it seems like everybody in the Southwest who isn't otherwise gainfully employed is a student at the University of Texas.

Per-capita income figures mirror other statistics for the region, ranging from the most urban and industrialized state, Texas, to the most rural and agricultural one, Arkansas. This pattern, incidentally, repeats itself over and over across the country.

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graphic arts monthly

THE MAGAZINE OF THE PRINTING INDUSTRY

New York Scene
With Laser Light, High-Tech Prep Shops Write Next Chapter

Graph Expo 90, Update on Paper Recycling

VOLUME 62, NUMBER 9

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Trade Leads Revival of Economic Growth

The economy is poised to head upward after almost two years of slow growth. Cahners Economics forecasts the economy to grow 2.1% this year, after adjusting for inflation, and almost 3% in 1991. While growth will be relatively balanced throughout the economy, exports of goods and services will remain a bright spot.

The decline of the dollar since early 1985 produced rapid growth in exports. Over the past three years, export growth has averaged 14% per year after adjusting for inflation. While we expect growth to slow to about 6% per year for this year and next, that's still twice the rate of growth in the overall economy.

These projected trade increases assume continued efficiency in the U.S. manufacturing process, and a stable dollar relative to the currencies of our trading partners. Several recent developments indicate the upward movement could be much greater.

The economic integration of Europe, to be completed by 1991, will offer tremendous opportunities for U.S. manufacturers. Instead of the current fragmented system, an integrated European staff will be able to market standard products conforming to standard regulations.

The opening of Eastern Europe will offer similar growth opportunities for U.S. manufacturers. Fundamental changes in the economic and political systems must occur first, but, once development begins, the trade potential will be substantial.

Finally, recent trends indicate Japan will become less competitive in the international trade arena. Rising inflation has sparked an interest-rate upswing in Japan. Inexpensive capital, which has encouraged the investment that has fueled tradeable goods production, will decrease. Less competition from Japan will ensure greater penetration by U.S. manufacturers in the future.

In general, paper prices have remained fairly stable through the first half of this year, after falling significantly in late-1989. There is little expectation of further declines. Rather, paper prices are expected to remain stable through the end of 1990 before rebounding. Transaction price data shows a new surge beginning in certain types of paper, specifically directory-uncoated groundwood and bond-uncoated white papers. After an across-the-board decline this year compared to last year, paper transaction prices should see only modest gains in 1991.

PAPER TRANSACTION PRICES

				Annual % Change		
Paper Category ($/ton)	**Q2/89**	**Q1/90**	**Q2/90**	**1990**	**1991**	**1992**
Newsprint—30 lb. East	$ 578	$ 535	$ 535	-5.2	0.8	-4.4
Directory—uncoated groundwood 22.5 lb. white	850	730	753	-7.4	3.8	4.2
Supercalendered—uncoated groundwood 34 lb.	830	830	800	-1.5	3.1	8.8
Offset—uncoated groundwood	675	635	635	-2.8	3.1	7.1
Offset—uncoated white 50 lb.	900	820	820	-3.1	1.3	8.3
Coated—No. 1 70 lb.	1625	1610	1610	-0.1	2.5	6.5
Coated—No. 3	1270	1250	1250	-0.6	2.0	9.0
Coated—No. 5 34 lb. roto	1000	960	940	-5.0	1.1	5.7
Bond—uncoated white No. 1 20 lb.	1100	1090	1090	-1.7	1.1	8.5
Bond—uncoated white No. 4 20 lb.	1010	957	991	-3.6	1.3	9.2

Source: Pulp and Paper Week, Stock Price Index

What Dealers Want

An exclusive GAM survey reveals how dealers feel about a variety of important issues.

Graphic arts dealers are a diverse lot. Some are retailers, selling graphic arts supplies and/or equipment, others are brokers, some are actually distributors. Many specialize, in the hope of carving out their own niche and circumventing traditional dealer problems like a fickle buyer's market, price selling, manufacturer favoritism, or industry consolidation.

But are the problems mentioned above truly of concern to the typical graphic arts dealer? If you could gather several hundred dealers together and question them about their businesses, what would the collective answers be? GRAPHIC ARTS MONTHLY has done just that, in a recent exclusive survey, to determine how dealers feel about a variety of issues they face on a daily basis.

By Michael Karol
Managing Editor

The study was conducted by Cahners Publishing's Market Research Department, among a pool of 650 dealers listed in the *1990 Graphic Arts Monthly Sourcebook*. Two mailings were sent out in February and March of this year, garnering 208 responses, or a response rate of 33%.

Dealers were most vocal about the two issues they deemed "most important" to them: manufacturers bypassing the dealer community (cited by 26% of respondents), and equipment giveaways (22%). Other issues given weight by dealers include:

- manufacturer-direct sales of equipment and supplies to end-users (this sometimes results in dealers dropping manufacturer products and/or selling them less aggressively);
- manufacturer rebates, which one-third of respondents said are "losing their effectiveness";
- business consolidation among their customers; and
- exclusivity of product lines carried.

The dealers who responded to the survey handle, for the most part (78%), both printing equipment and supplies; 16% handle printing equipment only, and 6% carry only printing supplies. The majority of those dealers who handle equipment (85%) inventory locally, and 100% of those dealers carrying supplies indicated that they inventory supplies locally.

Eighty-two percent of respondents have a service department at their location. Roughly three-quarters (73%) said their dealerships are individually owned; 25% are part of a national chain. Average sales volume for 1989 for these 208 locations was $5.907 million.

On the most pressing of the issues facing graphic arts dealers—manufacturers' direct sales of equipment to end-users—54% of dealers who handle equipment said that such sales are increasing; 36% said those sales have remained the same; and 9% found the number to be decreasing. Of those dealers who handle supplies, 45% believe the number of manufacturer-direct sales of supplies to end-users has not changed; 42% say the number is increasing; and 9% said it was decreasing.

Overall, 47% of respondents indicated they would sell a manufacturer's products less aggressively if they continued to increase their number of direct sales; 37% said they would drop the manufacturer's products; 35% would open negotiations with the manufacturer; and 4.4% would shop for a competitive line. But 46% of dealers who handle equipment and 51% of dealers who carry supplies indicated that they have dropped manufacturer's products because of increasing direct sales to end-users.

(Continued on p. 114)

In the other "most important" issue affecting their business, respondents indicated there were an average of seven equipment giveaways (in their market areas) within the past 12 months which have directly affected their business. Most of the dealers (44%) said these giveaways had no significant impact on supply sales, although almost one-third (32.9%) felt the opposite, that giveaways had decreased supply sales. Some 17% reported equipment giveaways had the effect of increasing supply sales.

Dealers were vocal as to what action, if any, they take with regard to equipment giveaways. Some comments were: "None. A manufacturer will do as he pleases." "I started giving away equipment myself." "Notified them we would drop the line in the event of another occurrence." "Our hands are tied. You can't sue City Hall." "We are down to begging." "We changed suppliers." "Direct negotiations. We charged margin lost to manufacturer in some cases."

Other dealer issues were the cause of similar debate:

- Manufacturer rebates are believed to be beneficial by most (60%) of the respondents; 34% said rebates have lost their effectiveness as an incentive. "Add to profitability" (47%), "reinvest into the dealership" (27%), and "pass on savings to customers" (25%) were mentioned most often as way respondents made use of such rebates. General comments on the benefit or ineffectiveness of rebates ranged from, "In our competitive environment, smaller dealers sometimes sell at or near cost; therefore, the rebate is the profit," to "Equipment purchases are hardly ever made on an incentive basis," to a not-so-subtle, "Now manufacturers are prolonging the life of 'brain dead' dealers by feeding them intravenously."
- Sixty percent of dealers said they had not seen a significant number of business consolidation among their customers within the past three years. Of the rest, 38% reported a significant amount of customer consolidation, and 39% of these respondents indicated the consolidations have somewhat decreased business; 32% said they have somewhat increased business; and 21% said the consolidations have had no impact on business.

As to the impact of *manufacturer* consolidations on their businesses over the next two years, most dealers were in agreement with one who said, "The impact will be tremendous. There will be a lot of choosing sides."

Other comments: "I see deal-

What Sells a Manufacturer's Product?

	Extremely Important 6	5	4	3	2	Not Important 1	No Answer	Average Rate
Profitability	79.4%	16.7%	2.0%	0.5%	—	0.5%	1.0%	5.75
Manufacturer's overall reputation	52.9	32.8	10.8	1.0	0.5%	1.0	1.0	5.35
Delivery time	52.9	23.5	17.2	4.4	1.0	—	1.0	5.24
Completion of dealer order	43.6	32.8	16.2	3.9	—	0.5	2.9	5.18
Competitive price	44.1	31.9	16.7	4.9	0.5	1.0	1.0	5.12
Warranty service	44.6	27.0	19.1	5.4	1.5	1.0	1.5	5.06
Sales support & materials	40.7	30.9	21.1	4.4	1.5	0.5	1.0	5.04
Product training of dealer salesmen	35.3	31.4	22.1	7.4	2.0	1.0	1.0	4.89
New product development	28.9	36.8	25.5	5.4	1.5	1.0	1.0	4.84
Breadth of product line	26.5	32.4	24.5	10.3	3.4	0.5	2.5	4.68
Advertising & trade show support	13.7	23.0	33.8	18.1	7.8	2.0	1.5	4.11

BASE: 204 respondents
NOTE: Dealers were asked to rate the criteria below as to importance (6 = extremely important, 1 = not important) when selling a manufacturer's product. The closer the average rate is to "6.00", the more important the criteria.

erships evolving to one or two major line suppliers." "The day of being all things to all people is over." "We will narrow the number of lines we represent." "Instead of merely asking our customers what they want, we will be teaching our staff to sell aggressively the product lines which remain." "More direct sales. The independent dealer will be gone from major markets in three to five years. National chains will represent two or three manufacturers."

• Poor service support and training from manufacturers was a major issue for 8% of respondents. Dealers rated profitability as the most important product trait in terms of sellability, followed by manufacturer's overall reputation, delivery time, completion of dealer order, and competitive price. The most important sales support and training methods for equipment dealers were, in order, product literature, availability of training materials, and on-site customer training; for supplies dealers they were literature, sample availability, and availability of training materials.

Dealers commented that there were many incentives manufacturers could offer them to help achieve annual sales objectives, including: more selling help; more profitability, less giveaways; very close cooperation; pricing incentives; exclusive territories; joint calls to prospects; protection from manufacturer-direct sales; better sales reps and more frequent visits; good leads from national advertising; and more loyalty to the dealer. By far, exclusive territories, knowledgeable sales reps, and no giveaways were voiced most often.

The bottom line: dealers wish to be treated fairly and honestly, like most businesspeople. They would like a closer, stronger relationship with manufacturers, but they understand the realities of the business climate.

Most would be happy with, as one dealer said, "a mutual exchange of information and ideas" (no doubt coupled with rebates, an exclusive territory, and the most up-to-date sales and training methods available). Many would settle for the old standbys: quality product, good service, and on-time delivery. Nearly all are currently making do somewhere in between.

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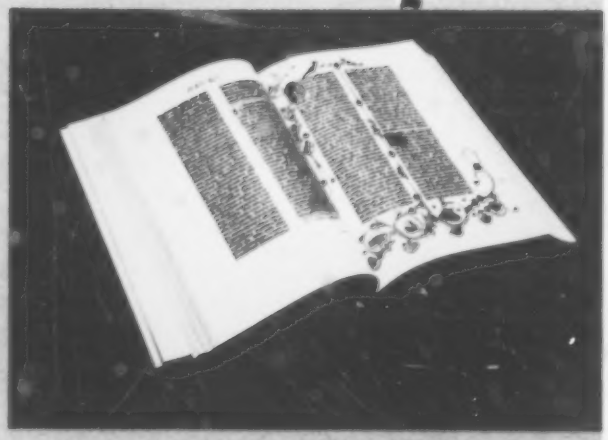

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Mid-Atlantic Region

The three Mid-Atlantic states are a pretty good match for each other. New York is the biggest by any measure (square miles, population, printing sites, traffic jam density, etc.), but all three are in the top 10 by population: New York ranks second with 17.8 million people, Pennsylvania fourth with 11.9 million, and New Jersey ninth with 7.6 million.

This has traditionally been a major printing industry hub, and still is. The commercial printing industry in these states produces an annual $13 billion in sales and employs more than 150,000 people. Furthermore, except for New York, the industry seems to be growing in the Mid-Atlantic.

Seems is the operative word. Look at the employment growth figures; you'll see that the big leader is New Jersey. Now look at the map. New York and Pennsylvania are big areas, but the overwhelming majority of the people in those states live in southwestern New York (New York City) or southeastern Pennsylvania (Philadelphia).

Both cities are afflicted with (among other things) high taxes and uncompromising unions. Suppose you're a printer in one of those places and you'd like to get away from the taxes and the unions: where are you going to go?

You cross the nearest river from either place and end up in New Jersey. That's almost entirely where the growth in New Jersey industry (note particularly "Other Manufacturing Growth") is coming from.

Jana Brenning

Unfortunately, crossing the Delaware or the Hudson Rivers doesn't make you independent of the region's economy, which is having something of a rough time. Housing prices in New York City have fallen about 16% in the last year, and, along with most other standard indicators, are at best flat, all the way from Massachusetts to Virginia.

What this probably means is a shakeout, during which competition—never very gentle in this market—is going to be even bloodier and more bare-knuckled than ever. If you're in it, watch your back.

Data for these reports come primarily from Printing Industries of America, the National Association of Printers and Lithographers, the U.S. Bureau of the Census, Trade and Technology Press of Stamford, Conn. (the publishers of *Printmarkets*, a highly useful source of industry data,) and GRAPHIC ARTS MONTHLY's own database.

Reprints of this installation of the Geography of Print may be ordered from Carol Bien, Cahners Publishing, Reprint Department, 1350 E. Touhy Ave., Des Plaines, IL 60018.

By Peter Johnston
Special Projects Manager

Regional Overview

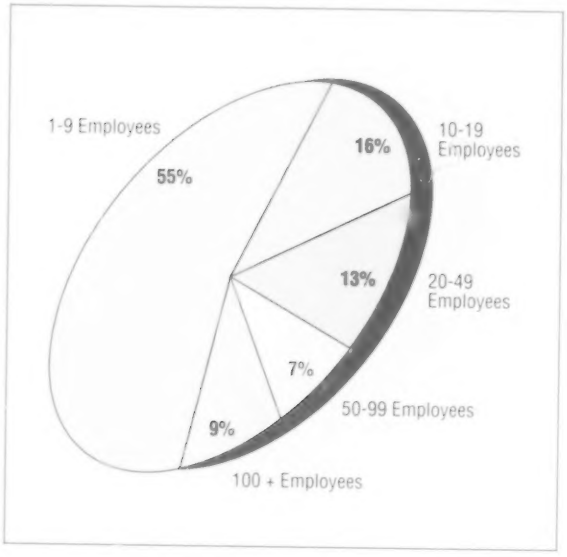
Note that these figures, taken from the GAM database, reflect the universe of printers in its widest sense. In most of the data on the next three pages, a smaller—though nonetheless still very large—universe of printers will be used. This is because we will be concerned with the way the printing industry in the Mid Atlantic region is divided up in terms of markets. This requires us to exclude newspapers, in-plant printers, and certain other plants These folks, while clearly printers, are not *economically measurable* as printers.

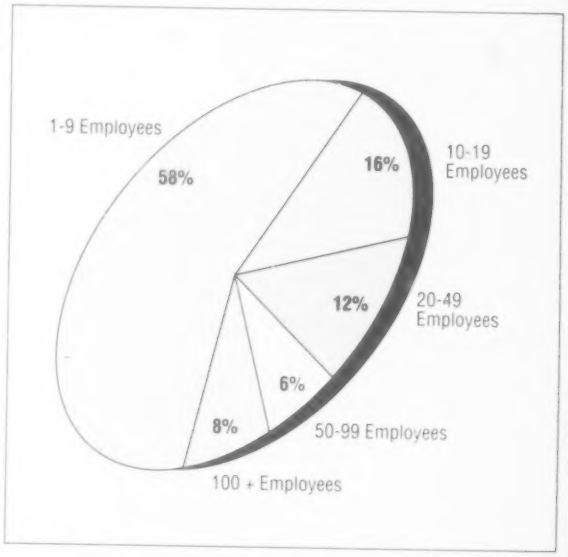
Mid-Atlantic Region, Plants by Employee Count

Size	# of Plants	% of Region
1–9 Employees	5,427	55%
10–19 Employees	1,579	16%
20–49 Employees	1,286	13%
50–99 Employees	655	7%
100 + Employees	879	9%
TOTAL	**9,826**	**100%**

United States, Plants by Employee Count

Size	# of Plants	% of Total
1–9 Employees	29,815	58%
10–19 Employees	8,381	16%
20–49 Employees	6,428	12%
50–99 Employees	3,147	6%
100 + Employees	3,846	8%
TOTAL	**51,617**	**100%**





Charts and graphs by Lisa Hilgers

Plants by Function

Overall, the Mid-Atlantic region accounts for about 19.3% of the total U.S. industry, measured by value of shipments (gross sales). Converters and trade printers are heavily concentrated here.

Function	# of Plants	% of U.S. Total
Commercial	5,040	19.3%
Newspaper (w/ Commercial)	208	12.8%
Newspaper (w/o Commercial)	357	15.9%
Book & Pub	481	18.9%
Business Forms	150	19.1%
Converters	473	25.3%
Noncommercial	1,440	18.8%
Trade	968	22.7%
Quick Printers	709	15.5%

Equipment Distribution

Equipment	Sites in Region	% of U.S. Total
Color Scanners	537	20.6%
Sheetfed Presses	6,831	28.8%
Heatset Web Offset Presses	801	21.0%
Folders	5,448	17.6%

These figures represent not pieces of equipment but sites where that equipment can be found. As can be seen, the region is over-represented in terms of almost everything. The enormous concentration of sheetfed capacity points to the New York City area's overwhelming importance in commercial and advertising printing. Newspapers are fewer in number and larger in circulation than the U.S. norm. Most of the web capacity, conversely, is in the region's smaller towns.

Commercial Printing

Value of Shipments

As noted in the introduction, all three of these states are printing powerhouses. At a total of $12.9 billion, the Mid-Atlantic region represents 19.3% of the nation's total commercial printing output. New York is the leader, with almost $6 billion, approximately 45% of the regional total. Pennsylvania has 31%, and New Jersey the remaining 24%. If current trends continue, New Jersey's share of the Mid-Atlantic total will probably increase.

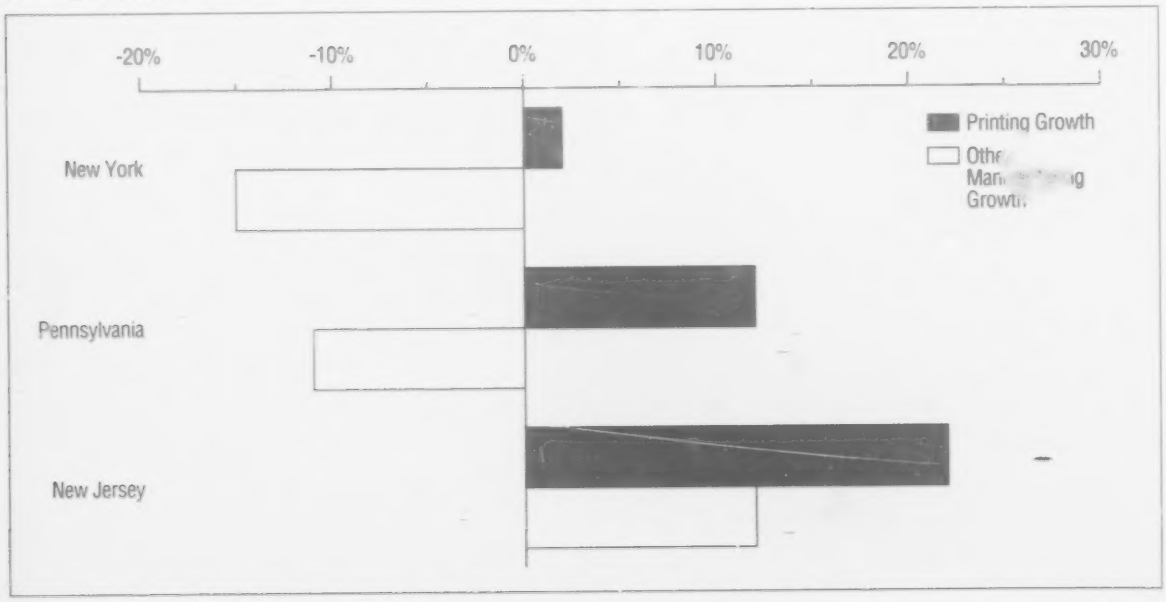
State	Sales	%
New York	5,800	45%
Pennsylvania	4,000	31%
New Jersey	3,100	24%
TOTAL	**12,900**	**100%**

Printing Sites

State	Sites	%
New York	3,984	54.8%
New Jersey	1,655	22.8%
Pennsylvania	1,633	22.4%
TOTAL	**7,272**	**100%**

If you compare sales for these states with number of sites you run into an interesting correlation. By these numbers, the average New York printer has sales of $1.5 million, as opposed to $1.9 million for New Jersey and $2.4 million for Pennsylvania. What this means is not that New York is a hotbed of small printers so much as that it has a lot of local activity. The other two states, especially Pennsylvania, have a heavy concentration of very high-volume plants printing for national markets (see list of large printers).

Printing Employment



In the introduction we discussed the probable source of New Jersey's healthy growth numbers—shrinkage from its neighbors. Pennsylvania seems to be managing some real growth in printing employment; in "other manufacturing" only New Jersey has positive numbers. It is worth noting that New York and Pennsylvania are both losing population; New Jersey, once again, shows a brighter picture.

States	Employees
New York	71,440
Pennsylvania	46,389
New Jersey	38,815
TOTAL	**156,644**

Leading Printers in Major Markets

Company, Location	Sales
COMMERCIAL/SPECIALTY Total 1438.6	
Day Timers Inc., East Texas, PA	126.0
Webcraft Tech., North Brunswick, NJ	115.0
Alford Industries, Ridgefield, NJ	77.2
The Topps Co., Brooklyn, NY	76.0
Keith Clark, Sidney, NY	72.0
Queens Group, Long Island City, NY	70.0
Shorewood Packaging, New York	47.7
Globe Ticket & Label, Warminster, PA	42.0
MacNaughton Einson Graph., Fairlawn, NJ	40.0
Kimball Systems, Morris Plains, NJ	37.0
Winchell Company (Clondalkin), Philadelphia	32.0
Panel Prints, Inc., Old Forge, PA	32.0
Esselte Bus. Systems, Garden City, NY	32.0
H. W. Wilson, Bronx, NY	27.5
Ivy Hill Corporation, New York	27.0
Amsterdam Printing and Litho, Amsterdam, NY	26.0
Penn Corp. (Western Pub.) New York	25.5
The Lehigh Press, Pennsauken, NJ	25.0
Applied Graphics Techniologies, New York	24.0
The Morrill Press (Engraph), Fulton, NY	24.0
American Bank Note Holographics, Elmsford, NY	21.9
Smith-Edwards-Dunlap Co., Philadelphia	21.0
The Colad Group, Buffalo, NY	20.0
Case-Hoyt Corporation, Chili, NY	19.0
Jostens Printing & Pub., State College, PA	15.0
Lasky Company, Milburn, NJ	15.0
Packard Press Corp., New York	14.2
Compton Press, Morris Plains, NJ	12.5
American Fiber-Velope Mfg. Co., Collingdale, PA	12.0
Direct Communications Group, Purchase, NY	12.0
Sandy Alexander, Inc., Clifton, NJ	10.9
Consolidated Revere Graph., Philadelphia	10.5
Panorama Press, Clifton, NJ	10.5
LaCiede Mfg. Co. Inc., Tonawanda, NY	10.0
F. M. Howell & Co., Elmira, NY	10.0
Case-Hoyt Corp., Rochester, NY	10.0
Warren Press, Inc., New York	10.0
Hoechstetter Printing Co., Pittsburgh	10.0
Tabard/Copley Graphics, New York	9.0
Science Press (Monroe), Ephrata, PA	9.0
Laurel Printing Inc., Elmsford, NY	8.0
Latham Process Corp., New York	8.0
Corporate Printing Co., New York	8.0
Specialty Printers of America, Scranton, PA	8.0
Bowne & Co., New York	8.0
Herst Litho, Inc., New York	8.0
Mastercraft Litho (Alford), Ridgefield, NJ	7.0
Sorg Inc., New York	7.0
Deven Lithographers, Brooklyn, NY	7.0
Penn Colour Graph., Huntington Valley, PA	7.0
Tanagraphics, New York	6.5
Barton Press, West Orange, NJ	6.5
Paxar Corp., Pearl River, NY	6.5
The Adams Group, New York	6.0
Uniflex, Inc., Hicksville, NY	6.0
Bridge Litho., Inc., New York	5.5
International Envelope Co., Aston, PA	5.5
Manhardt-Alexander Inc., Amherst, NY	5.5
Hoffman Printing, Buffalo, NY	5.5
Charles P. Young Co., New York	5.0
Rixie Paper Products (Engraph), Pottstown, PA	4.5
Web Graphics, Glens Falls, NY	4.5
Master Eagle Graphic Services, New York	4.0
Monroe Litho (Graphic Ind.), Rochester, NY	4.0
JTC Corporation, Union, NJ	4.0
Aztech Financial Ptrs (Devon), New York	3.7
Waldman Graphics, Inc., Pennsauken, NJ	3.5
Intelligencer Printing Co., Lancaster, PA	3.5
Pearl-Pressman-Liberty, Philadelphia	3.0
Lehigh Litho (Alcom), Bethlehem, PA	3.0
Interform Corp., Bridgeville, PA	3.0
Pace Press (Metro Litho), New York	3.0
Horowitz/Rae Book Mfrs., Fairfield, NJ	3.0
Georgian Press, Inc., New York	3.0
Braceland Brothers, Inc., Philadelphia	2.5
Keener Mfg., Lancaster, PA	2.5
Denney-Reyburn Co., West Chester, PA	2.0
L.K. Litho, Middle Island, NY	2.0
Data Papers, Inc., Muncy, PA	2.0
Wise Business Forms, Butler, PA	2.0
Canterbury Press, Rome, NY	1.0
FINANCIAL/LEGAL Total 815.8	
Pandick, Inc., New York	170.0
Bowne & Co., Inc., New York	134.5
Safeguard Business Sys., Fort Washington, PA	100.0
United States Banknote Co., New York	62.0
American Bank Note Co., New York	59.2
Sorg Inc., New York	58.8
Charles P. Young Co., New York	40.0
R. R. Donnelley/Steel Way, Lancaster, PA	38.0
Packard Press Corp., New York	32.3
R. R. Donnelley, New York	30.0
Corporate Printing Co., New York	22.0
Aztech Financial Ptrs (Devon), New York	14.5
Julius Blumberg, Inc., New York	13.0
Latham Process Corp., New York	11.0
Scott Printing Corp., Jersey City, NJ	9.5
Financial Press (Donnelley), Pittsburgh	7.0
The Adams Group, Inc., New York	5.0
Panorama Press, Clifton, NJ	3.0
OCR Data Systems, Inc., Elmsford, NY	3.0
Wise Business Forms, Butler, PA	3.0
MAGAZINE Total 709.0	
R. R. Donnelley & Sons Co., Lancaster, PA	110.0
Maxwell Communications, Atglen, PA	65.0
Arcata Graphics Co., Depew, NY	60.0
Mack Printing Co., Easton, PA	50.0
R. R. Donnelley & Sons Co., Lancaster, PA	40.0
Quad/Graphics, Inc., Saratoga Springs, NY	40.0
Brown Printing Co., East Greenville, PA	35.0
Sullivan Graphics, Inc., Dunkirk, NY	30.0
Great Eastern Color, Poughkeepsie, NY	26.5
Hughes Printing (Monroe), East Stroudsburg, PA	25.0
The Sheridan Press, Inc., Hanover, PA	22.[illegible]
Watchtower Bible and Tract, Brooklyn, NY	22.0
Lancaster Press, Inc., Lancaster, PA	20.0
Sullivan Graphics, Inc., York, PA	20.0
The Sheridan Press, Hanover, PA	18.0
SLC Graphics, Inc., Pittston, PA	17.5
L. P. Thebault Co., Parsippany, NJ	15.0
Sowers Printing Company, Lebanon, PA	13.0
The Hibbert Group, Trenton, NJ	11.0
Wilcox Press, Inc., Ithaca, NY	10.0
Science Press (Monroe), Ephrata, PA	9.0
Able Printing Co., Cherry Hill, NJ	7.0
Braceland Brothers, Inc., Philadelphia	6.5
Jersey Printing Co., Inc., Bayonne, NJ	6.0
Packard Press Corp., New York	5.5
Haddon Craftsmen (Sullivan), Scranton, PA	5.0
Case-Hoyt Corporation, Rochester, NY	5.0
Penn Colour Graphics, Huntingdon Valley, PA	4.0
Canterbury Press, Rome, NY	2.5
Waldman Graphics, Inc., Pennsauken, NJ	2.5
L. K. Litho, Middle Island, NY	2.0
Balan Printing, Inc., Brooklyn, NY	2.0
Fort Orange Press, Inc., Albany, NY	1.0
Wickersham, Printing Co., Inc., Lancaster, PA	1.0
BUSINESS FORMS Total 705.3	
Safeguard Business Sys., Fort Washington, PA	105.0
Vermont Computer Forms, River Edge, NJ	87.0
Transkrit Corporation, Brewster, NY	64.5
Paris Business Forms, Burlington, NJ	42.8
Interform Corporation, Bridgeville, PA	42.0
JTC Corporation, Union, NJ	38.0
Federal Business Products, New York	27.0
Vanguard Group, Huntington, NY	23.5
Bregg Data Forms, Inc., Hauppauge, NY	20.0
Esselte Business Systems, Garden City, NY	20.0
Web Graphics, Glens Falls, NY	20.0
Wise Business Forms, Butler, PA	20.0
Specialized Printed Forms, Caledonia, NY	19.7
Datatel Resources Corp., Monaca, PA	19.0
Hygrade Printing Corp., West Caldwell, NJ	18.5
Carci Alfi Forms & Labels, Hauppauge, NY	14.0
Spectra Graphics, Willow Grove, PA	13.0
Maggio Data Forms, Hauppauge, NY	13.0
Data Papers, Inc., Muncy, PA	10.0
Eastern Continuous Forms, North Wales, PA	10.0
SBF Communication Graph., Philadelphia	10.0
RMF Business Forms, Inc., Buffalo, NY	9.5
Newtown/Forms, Inc. (Spectra), Newtown, PA	9.0
Belknap Business Forms, Westfield, NY	8.8
Pavey Envelope & Tag, Jersey City, NJ	7.5
Denney-Reyburn Co., West Chester, PA	7.0
International Business Sys., King of Prussia, PA	7.0
All-States Business Products, Dover, NJ	7.0
OCR Data Systems, Inc., Elmsford, NY	6.5
Bowne & Co., Inc., New York	6.0
ADVERTISING Total 540.3	
The Hibbert Group, Trenton, NJ	44.0
Charles Communications Inc., New York	40.0
Direct Communications Group, Purchase, NY	32.0
Tanagraphics, New York	20.0
Case-Hoyt Corporation, Rochester, NY	20.0
Parkway Sterling Regal, New York	20.0
Lasky Company, Milburn, NJ	20.0
Webcraft Technologies, North Brunswick, NJ	20.0
Lebanon Valley Offset, Annville, PA	20.0
Deven Lithographers, Brooklyn, NY	19.0
Ivy Hill Corporation, New York	17.0
L.P. Thebault Co., Parsippany, NJ	15.5
International Litho., Philadelphia	14.5
Barton Press, West Orange, NJ	14.0
LithoCraft, Inc., Carlstadt, NJ	13.5
Herst Litho, Inc., New York	12.0
Georgian Press, Inc., New York	12.0
Monroe Litho (Graphic Ind.), Rochester, NY	11.5
Enterprise Press, New York	11.0
MGI Industries, Inc., New York	11.0
Laurel Printing Inc., Elmsford, NY	11.0
Lenz & Riecker, Inc., New York	10.0
Bridge Litho., Inc., New York	10.0
Case-Hoyt Corp., Chili, NY	10.0
Sandy Alexander, Inc., Clifton, NJ	10.0
Jersey Printing Co., Inc., Bayonne, NJ	10.0
Direct Press Modern Litho, Huntington Station, NY	9.0
Pace Press (Metro Litho), New York	9.0
Intelligencer Printing Co., Lancaster, PA	8.0
Latham Process Corp., New York	7.0
Consolidated Revere Graphics, Philadelphia	7.0
Bowne & Co., Inc., New York	6.0
Manhardt-Alexander Inc., Amherst, NY	6.0
Artcraft Unlimited Inc., Pittsburgh	5.5
Argus Press Inc., Albany, NY	5.3
Hoffman Printing, Buffalo, NY	5.0
Pace DeTorres (Metro Litho), Moonachie, NJ	4.0
Pictorial Offset Corp., Carlstadt, NJ	3.5
Service Press, Metuchen, NJ	3.5
Baum Printing, Inc., Philadelphia	3.0
Data Papers, Inc., Muncy, PA	3.0
The Adams Group, Inc., New York	3.0
Tabard/Copley Graph. (Pubco), New York	3.0
Keener Mfg., Lancaster, PA	1.5

MID-ATLANTIC REGION

Tables of leading printers given in order of overall market size. This will vary from region to region.

Company, Location	Sales
INSERT	**Total 446.3**
Charles Communications, New York	128.0
R.R. Donnelley & Sons Co., Lancaster, PA	45.0
Sullivan Graphics, Inc., Dunkirk, NY	45.0
Sullivan Graphics, Inc., York, PA	35.0
Quad/Graphics, Inc., Saratoga Springs, NY	35.0
Butler Color Press, Butler, PA	22.5
Webcraft Technologies, North Brunswick, NJ	20.0
Meehan Tooker, East Rutherford, NJ	17.0
Able Printing Co., Cherry Hill, NJ	12.0
Greater Jersey Press, East Brunswick, NJ	10.8
Somerset Publishing Co., Somerset, NJ	10.0
Maxwell Communications, Atglen, PA	10.0
Intelligencer Printing Co., Lancaster, PA	10.0
KTB Associates, Inc., Saugerties, NY	8.5
Typecraft Press Inc., Pittsburgh	8.0
Suburban Publishers, Exeter, PA	7.0
Septum Printing Corp., Oceanside, NY	6.0
Ampco Printing Corporation, Bronx, NY	5.0
Brown Printing Co., East Greenville, PA	5.0
Balan Printing, Inc., Brooklyn, NY	2.5
Drucker Printing (Meehan-Tooker), Linden, NJ	2.0
Wood Press, Inc., Paterson, NJ	2.0

Company, Location	Sales
BOOK	**Total 426.5**
Arcata Graphics Company, Depew, NY	55.0
Arcata Graphics Company, Fairfield, PA	55.0
Maple-Vail Book Group, York, PA	43.0
Haddon Craftsmen (Sullivan), Scranton, PA	40.0
Offset Paperback (Bertelsmann), Dallas, PA	37.0
Horowitz/Rae, Fairfield, NJ	27.0
National Publishing (Courier), Philadelphia	26.7
Maple-Vail Book Group, Binghamton, NY	22.0
MacNaughton Einson Graphics, Fairlawn, NJ	18.0
L.P. Thebault Company, Parsippany, NJ	14.0
Braceland Brothers, Inc., Philadelphia	12.0
Hamilton Printing, Castleton, NY	10.0
Crest Litho, Inc., Watervliet, NY	9.3
Lenz & Riecker, Inc., New York	9.0
Algen Press Corp., College Point, NY	7.5
Boyd Printing Company, Inc., Albany, NY	6.5
L.K. Litho, Middle Island, NY	6.0
Dynamic Graphic Finishing, Horsham, PA	5.0
Sorg Inc., New York	5.0
Pearl-Pressman-Liberty, Philadelphia	4.0
Wickersham Printing Co., Lancaster, PA	3.0
Penn Colour Graphics, Huntingdon Valley, PA	3.0
Waldman Graphics, Inc., Pennsauken, NJ	2.5
Canterbury Press, Rome, NY	2.0
Science Press, Ephrata, PA	2.0
Fort Orange Press, Inc., Albany, NY	2.0

Company, Location	Sales
DIRECT MAIL	**Total 425.2**
Webcraft Technologies, North Brunswick, NJ	85.0
Charles Communications Inc., New York	42.0
Meehan Tooker, East Rutherford, NJ	33.0
Scanforms, Inc., Bristol, PA	20.6
Mars Graphic Services, Inc., Westville, NJ	16.1
Lasky Company, Milburn, NJ	16.0
Smith-Edwards-Dunlap Co., Philadelphia	15.5
Newtown/Forms (Spectra), Newtown, PA	15.0
Pictorial Offset Corp., Carlstadt, NJ	13.5
Laurel Printing Inc., Elmsford, NY	13.0
Metro Seliger Ind., Woodside, NY	12.0
Sandy-Alexander, Inc., Clifton, NJ	10.0
International Litho, Philadelphia	10.0
Ampco Printing Corp., Bronx, NY	10.0
Enterprise Press, New York	10.0
Intelligencer Printing Co., Lancaster, PA	9.0
Pace DeTorres (Metro Litho), Moonachie, NJ	8.0
American Fiber-Velope Mfg. Co., Collingdale, PA	8.0
Newtown Press, Plainview, NY	7.0

Company, Location	Sales
Able Printing Co., Cherry Hill, NJ	7.0
International Envelope Co., Aston, PA	6.5
Scott Printing Corp., Jersey City, NJ	6.0
Service Press, Metuchen, NJ	6.0
LithoCraft, Inc., Carlstadt, NJ	5.5
Colorforms, Inc. (MGI), Tonawanda, NY	5.0
SBF Communication Graph., Philadelphia	5.0
Pavey Envelope & Tag Corp., Jersey City, NJ	3.5
Bregg Data Forms, Inc., Hauppauge, NY	3.5
Wood Press, Inc., Paterson, NJ	3.5
OCR Data Systems, Inc., Elmsford, NY	3.0
SLC Graphics, Inc., Pittston, PA	3.0
Drucker Printing (Meehan-Tooker), Linden, NJ	3.0
Baum Printing, Inc., Philadelphia	3.0
Septum Printing Corp., Oceanside, NY	2.5
Balan Printing, Inc., Brooklyn, NY	2.0
Data Papers, Inc., Muncy, PA	2.0
International Business Sys., King of Prussia, PA	1.5

Company, Location	Sales
PREPRESS	**Total 372.7**
Applied Graphics Technologies, New York	73.0
Potomac Graphic Ind., New York	28.0
Master Eagle Graphic Services, New York	23.0
Lincoln Graphics, Inc., Cherry Hill, NJ	19.0
Kwik International Color, New York	18.5
Phototype Color Graphics, Pennsauken, NJ	18.1
GS Imaging (Techtron), Carlstadt, NJ	18.0
Quality House of Graphics, Long Island City, NY	18.0
York Graphic Services, Inc., York, PA	15.0
Offset Separations, New York	14.5
Armotek Industries, Inc., Palmyra, NJ	13.8
The Beck Company, Langhorne, PA	12.0
Walker-Prismatic Engraving, New York	11.0
Tartaro Slavin Colour Service, New York	10.0
Tapley-Rutter Co. (Donnelley), Moonachie, NJ	10.0
Data Comp Corp. (Volt), Voorhees, NJ	10.0
Haddon Craftsmen (Sullivan), Allentown, PA	8.0
Gotham Graphics Inc., Lyndhurst, NJ	7.2
Waldman Graphics, Inc., Pennsauken, NJ	7.0
Lancaster Press, Inc., Lancaster, PA	6.0
Haddon Craftsmen (Sullivan), Scranton, PA	6.0
Compton Press, Morris Plains, NJ	5.0
Science Press, Ephrata, PA	4.0
MGI Industries, Inc., New York	3.5
Publishers Book Bindery, Long Island City, NY	3.0
Graphic Industries, Inc., Carlstadt, NJ	3.0
Pearl-Pressman-Liberty, Philadelphia	2.5
Western Publishing Group, New york	2.5
Tele Composition (Alcom), Clifton Heights, PA	2.0
L.K. Litho, Middle Island, NY	2.0
Argus Press Inc., Albany, NY	1.2
Boyd Printing Company, Albany, NY	.0

Company, Location	Sales
CATALOG	**Total 363.0**
R.R. Donnelley/Lancaster East, Lancaster, PA	65.0
R.R. Donnelley/Steel Way, Lancaster, PA	50.0
Lasky Company, Milburn, NJ	20.0
Suburban Publishers, Exeter, PA	19.0
Direct Press Modern Litho, Huntington Station, NY	18.0
Meehan Tooker, East Rutherford, NJ	16.0
Case-Hoyt Corporation, Rochester, NY	15.0
Sandy-Alexander, Inc., Clifton, NJ	12.0
Case-Hoyt Corporation, Chili, NY	10.0
Braceland Brothers, Inc., Philadelphia	9.0
L.P. Thebault Company, Parsippany, NJ	9.0
Waldman Graphics, Inc., Pennsauken, NJ	8.5
Haddon Craftsmen (Sullivan), Scranton, PA	7.0
Mack Printing Company, Easton, PA	7.0
MGI Industries/Colorforms, New York	6.5
Latham Process Corp., New York	6.0
LithoCraft, Inc., Carlstadt, NJ	6.0

Company, Location	Sales
Metro Litho, Moonachie, NJ	6.0
Pearl-Pressman-Liberty, Inc., Philadelphia	6.0
Lebanon Valley Offset, Annville, PA	6.0
Lenz & Riecker, Inc., New York, NY	5.5
Monroe Litho, Inc., Rochester, NY	5.5
Sowers Printing Co., Lebanon, PA	5.0
Havertown Printing Co. (Alcom), Broomall, PA	5.0
Arcata Graphics Company, Depew, NY	5.0
Brown Printing Company, East Greenville, PA	5.0
Baum Printing (Graphic Ind.), Philadelphia	4.0
Wood Press, Inc., Paterson, NJ	3.0
L.K. Litho, Middle Island, NY	3.0
Crest Litho, Inc., Watervliet, NY	3.0
Science Press (Monroe), Ephrata, PA	2.0
Drucker Printing (Meehan-Tooker), Linden, NJ	2.0
Balan Printing, Inc., Brooklyn, NY	2.0
Fort Orange Press, Inc., Albany, NY	1.5
Canterbury Press, Rome, NY	1.5
Wickersham Printing Co., Lancaster, PA	1.0

Company, Location	Sales
LABEL	**Total 361.0**
International Paper Co., Purchase, NY	85.0
Patton (Engraph. Inc.), Moorestown, NJ	40.0
Topflight Corp., York, PA	21.0
Bertek, Fort Lee, NJ	20.0
Allegheny Label, Inc., Cheswick, PA	19.5
National Label Co., Lafayette Hills, PA	18.0
Denney-Reyburn Co., West Chester, PA	18.0
York Tape & Label (Uarco), York, PA	18.0
Transkrit Corp., Brewster, NY	15.5
Globe Ticket & Label (Empery), Warminster, PA	13.5
Rothchild Printing Company, Elmhurst, NY	11.5
McCourt Label Co., Lewis Run, PA	11.0
Ever Ready Label Corp., Belleville, NJ	10.5
Tolas Health Care Packaging, Newtown, PA	10.0
Carci Alfi Forms & Labels Inc., Hauppauge, NY	9.0
Calmont Label Co., Northvale, NJ	8.0
May Tag & Label Corp., Hillside, NJ	7.5
Wise Tag & Label Co., Pennsauken, NJ	5.5
Pavey Envelope & Tag Corp., Jersey City, NJ	5.5
F.M. Howell & Co., Elmira, NY	5.0
Keener Manufacturing, Lancaster, PA	3.5
Mastercraft Litho (Alford), Ridgefield, NJ	3.0
Wood Press, Inc., Paterson, NJ	1.5
Interform Corporation, Bridgeville, PA	1.0

Company, Location	Sales
DIRECTORY	**Total 207.0**
R.R. Donnelley & Sons Co., Lancaster, PA	135.0
Colonial Penn Insurance Co., Philadelphia	51.5
Havertown Printing (Alcom), Broomall, PA	10.0
Latham Process Corp., New York	4.0
Science Press (Monroe), Ephrata, PA	3.0
Wickersham Printing Co., Lancaster, PA	2.0
Balan Printing, Inc., Brooklyn, NY	1.5

Company, Location	Sales
GREETING CARDS	**Total 24.0**
Burgoyne, Inc., Philadelphia	12.0
Rousana Greeting Cards, Lakewood, NJ	5.5
Alfred Mainzer Inc., Long Island City, NY	3.5
Brett-Forer Greetings, New York	3.0

Figures given for sales are in millions of dollars. Data taken from Printmarkets, Trade & Technology Press, Stamford, Conn.

If you'd like to rent the list of names of people in any of the printing establishments in this section, please contact Jim Long, Direct Mail Services, Cahners Publishing, 249 W. 17th St., N.Y., N.Y. 10011; or call 1-800-537-7930.

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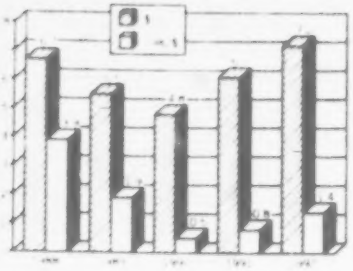
OUTLOOKOUTLOOK**OUTLOOK**OUTLOOKOUTLOOKOUTLOOKOUT

Consumer Caution Affects Retail Spending Patterns



On top of slowing income growth and sluggish overall economic growth, add consumer concerns caused by the Middle East crisis. Responding to these new developments, the consumer confidence index dropped precipitously in August to 83.8 (1985 = 100), a level not seen since early 1983 (and five consecutive months of decline).

Reflecting this nervousness, consumer spending has been sluggish, at best. Retail sales totaled $149.5 billion in July 1990, up 2.8% above the year-ago total. Year-to-date sales increased 4.1% above the same period in 1989. Inflation-adjusted growth reached only 0.5%.

The consumer sector surely will not lead the impending economic upturn. Our forecast of retail sales calls for 4.8% growth this year, followed by a 6.1% gain in 1991. In real terms, this translates into gains of 0.5% and 0.8%. Nonetheless, once the upturn begins and confidence is regained, consumer spending should resume.

The consumer sector's sluggishness holds widespread implications for commercial printers. First of all, slowing retail sales dampen demand for print advertising expenditures. We have already seen this effect in the newspaper sector. As such, print activity stemming from print advertising in newspapers and magazines will remain stagnant through the end of this year.

Secondly, printers engaged in printing reading materials, such as books, magazines, and periodicals, will also see a slowdown in activity. While not as income-sensitive as higher-priced items like appliances and automobiles, consumer spending on reading materials relies on overall economic trends and their impact on income growth.

Finally, consumer expenditures on personal and business services dictate the level of business in these industries and, ultimately, the need for printed forms and documents. As consumers reconsider their spending plans, companies providing legal, financial, and real estate services will see a cutback in their business activity levels.

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The printing and publishing industry remains one of the fastest-growing in terms of employment growth. Employment increased by 12,100 in the first half of 1990, and is headed for a 1.6% rise by year-end. With industry output growth outpacing employment growth, the result is further gains in productivity. To date, productivity is up 2.4% above last year. Wages, on the other hand, have been heating up. Following five years of modest gains, wages are headed for increases of 3.4% to 3.8% over the next few years.

PRINTING INDUSTRY SUPPLY INDICATORS

				Annual Percent Change			
	June 89	May 90	June 90	1989	1990	1991	1992
Employment							
Printing & publishing (1)	1610.1	1628.7	1631.9	2.9	1.6	2.7	3.0
Commercial printing (1)	573.6	582.6	583.1	3.5	2.0	2.9	3.7
Productivity							
Printing & publishing (2)	106.7	103.1	108.6	3.1	2.1	4.0	2.2
Average Hourly Earnings							
Printing & publishing (3)	10.75	11.15	11.15	3.3	3.4	3.5	3.8
Commercial printing (3)	10.98	11.43	11.46	3.4	3.6	3.5	4.3
Paper shipments							
Coated paper (4)	580	621	603	-2.6	4.4	9.0	2.4
Uncoated groundwood (4)	139	144	145	10.0	3.1	5.9	2.7
Uncoated free sheet (4)	886	938	910	-2.6	6.1	5.6	1.6
	01/89	04/89	01/90	1989	1990	1991	1992
Graphic Arts Machinery							
New orders (5)	153.2	163.9	152.2	4.0	9.8	7.7	4.3
Shipments (5)	163.2	146.0	146.4	1.5	3.4	16.4	3.8
Graphic Arts Supplies							
Shipments (5)	142.2	150.8	151.4	4.5	3.4	5.3	4.0

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THE GEOGRAPHY OF PRINT

graphic arts monthly

Pacific Region

Jana Brenning

Over the course of this leisurely survey of the printing industry as it flourishes (or, rarely, doesn't flourish) in the various regions of these United States, we've had occasion from time to time to remark over the tendency of some states to dominate their region. Texas, for example. Colorado. Illinois.

Those states, however, are mere amateurs of domination compared to what we've got on our hands this month. By any standard of measurement known to the standard bearers of demography, including printing, California stands out in the Pacific.

Alaska is geographically the largest state, of course, and is also in this region. But more than 50 times as many people live in California as live in Alaska. Even Washington, the next contender in the Pacific region, has only about one-sixth the population of California. The others, Oregon and Hawaii, are smaller still.

Different as each state is, the Pacific region is a healthy one. All the states except Oregon show sizeable increases in population; all have young populations which are educated well beyond the national norm. Except for Oregon, they also perform well above the norm in terms of per capita income.

Most of the Pacific region's printing industry is, as expected, in California. The industry profile is a bit different than the national pattern. There are proportionally fewer large printers and more small ones, especially quick printers; the Pacific region has 11.6% of total U.S. commercial printing volume, but just over 20% of quick printers.

In terms of employment growth (as shown in the charts, measured 1982-88), the industry is doing well in the Pacific region. Growth in Hawaii was a spectacular 68%, far above the general population gain—not to mention "other manufacturing", of which there is precious little in the islands, the Pacific Ocean being something of an obstacle to the free flow of goods. The others are doing well in both categories; Alaska, in fact, shows a 30% growth in "other manufacturing", one of the few states in which this catogory is ahead of printing growth.

Data for these reports come primarily from Printing Industries of America, the National Association of Printers and Lithographers, the U.S. Bureau of the Census, Trade and Technology Press of Stamford, Conn. (the publishers of *Printmarkets*, a highly useful source of industry data), and GAM's own database.

Reprints of this installation of the Geography of Print may be ordered from Carol Bien, Cahners Publishing, Reprint Department, 1350 East Touhy Ave., Des Plaines, Ill., 60018.

By Peter Johnston
Special Projects Manager

Regional Overview

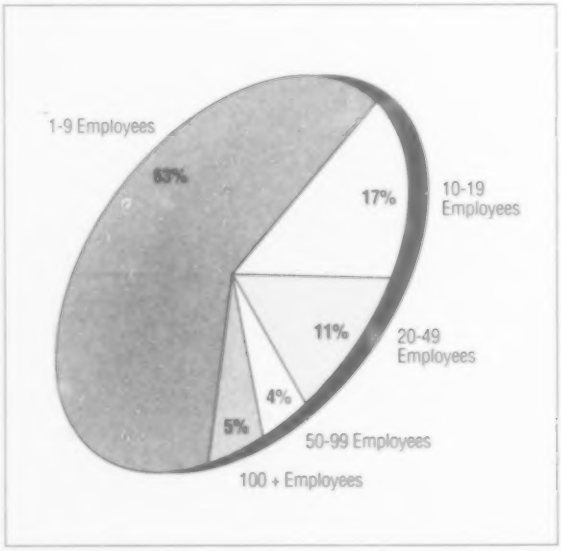
Note that these figures, taken from the GAM database, reflect the universe of printers in its widest sense. In most of the data on the next three pages, a smaller, though nonetheless still very large, universe of printers will be used. This is because we will be concerned with the way the printing industry in the Pacific region is divided up in terms of markets. This requires us to exclude newspapers, inplant printers, and certain other plants. These businesses, while clearly printers, are not *economically measurable* as printers.

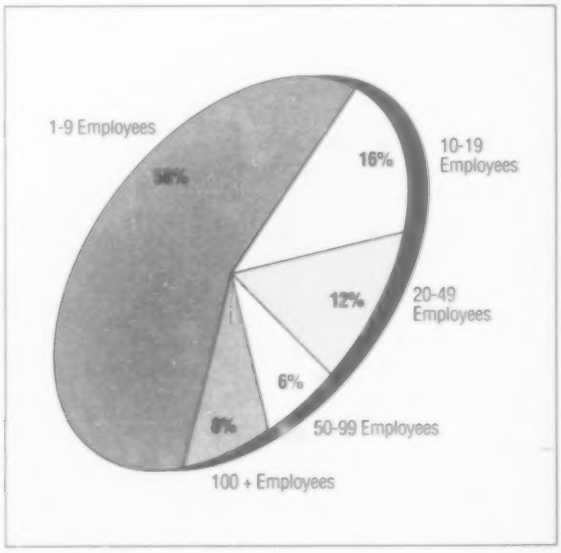
Pacific Region, Plants by Employee Count

Size	# of Plants	% of Region
1–9 Employees	5,158	63%
10–19 Employees	1,353	17%
20–49 Employees	868	11%
50–99 Employees	371	4%
100 + Employees	442	5%
TOTAL	**8,192**	**100%**

United States, Plants by Employee Count

Size	# of Plants	% of Total
1–9 Employees	29,815	58%
10–19 Employees	8,381	16%
20–49 Employees	6,428	12%
50–99 Employees	3,147	6%
100 + Employees	3,846	8%
TOTAL	**51,617**	**100%**





Charts and graphs by Lisa Hilgers

Plants by Function

Overall, the Pacific region accounts for about 11.6% of the total U.S. industry, as measured by value of shipments (gross sales). Publication, quick, and trade printers are heavily concentrated here.

Function	# of Plants	% of U.S. Total
Commercial	4,053	15.6%
Newspaper (w/ Commercial)	144	8.9%
Newspaper (w/o Commercial)	355	15.7%
Book & Pub	451	17.8%
Business Forms	114	14.5%
Converters	210	11.2%
Noncommercial	1,154	15.0%
Trade	781	18.3%
Quick Printers	930	20.3%

Equipment Distribution

Equipment	Sites in Region	% of U.S. Total
Color Scanners	351	13.5%
Sheetfed Presses	5,702	24.0%
Heatset Web Offset Presses	493	12.9%
Folders	4,521	14.6%

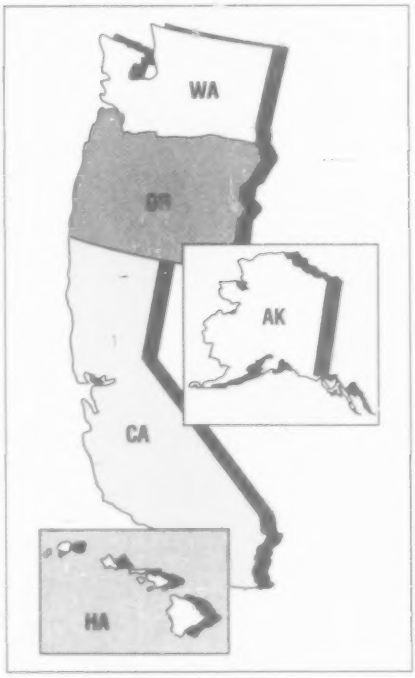
These figures represent not pieces of equipment but sites where that equipment can be found. As can be seen, the region is slightly over-represented in terms of almost everything; the relative isolation of the West Coast requires it to be self-sufficient. The heavy concentration of sheetfed capacity points to the disproportionate incidence of small commercial and quick printers in the region. Just printing for California means you're printing for 11% of the U.S. population.

Commercial Printing

Value of Shipments

As noted in the introduction, most of the economic—and printing—action in the Pacific region is in California. At 82.5% of the region's commercial sales, it is clearly so different from its neighbors as to exist in a category by itself. By contrast, in any of the big Eastern states, you'll find more printing than Hawaii, Alaska, Oregon and Washington combined; as a matter of fact, there are *blocks* in New York or Chicago with more printing volume than most of these states.

State	Sales	%
California	6,500	82.5%
Washington	648	8.2%
Oregon	572	7.3%
Hawaii	127	1.6%
Alaska	35	0.4%
TOTAL	**7,882**	**100%**

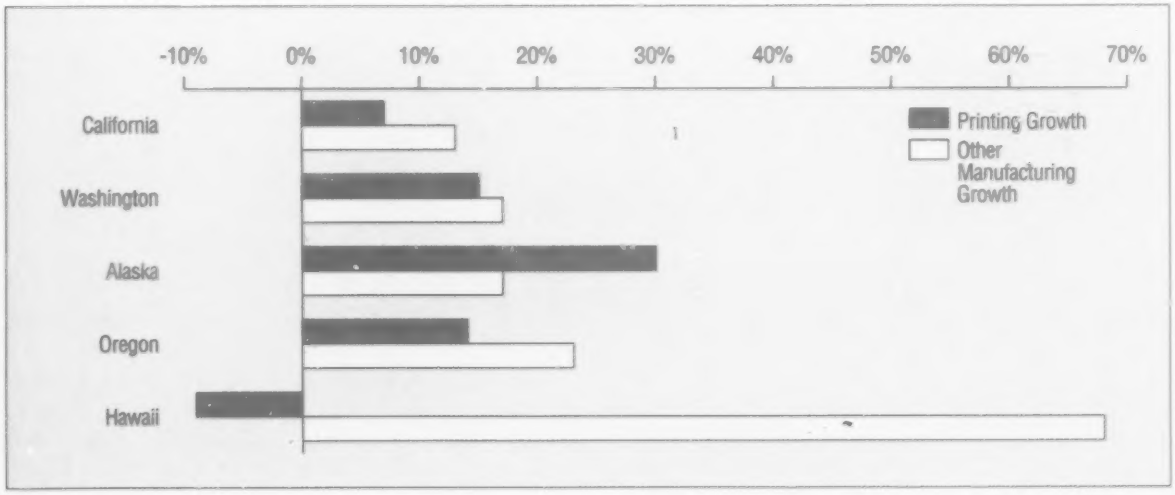


Printing Sites

State	Sites	%
California	4,757	80.0%
Washington	599	10.0%
Oregon	464	7.8%
Hawaii	93	1.6%
Alaska	33	0.6%
TOTAL	**5,946**	**100%**

Comparing sales for these states with number of sites, California becomes less monolithic. The reason: the other, less urban, states, have proportionately fewer large printers, and thus a larger universe of small ones vis a vis their total volume. In fact, some of the spread may be due to local economic factors. Average sales of $1.36 million in Hawaii versus $1.23 million in Oregon could mean slightly larger printers, on average, in Hawaii. It could also mean that printing is more expensive in Hawaii.

Printing Employment



As discussed in the introduction, this is, relatively speaking, an economically healthy part of the country. It's useful in this context to remember that printing tends to reflect the general state of the local economy, and that it rises or falls along with that economy. California is essentially the only one of these states with a truly diversified economy. The others are generally dependent on solely one or two major sources of income: petrochemicals (Alaska), tourism (Hawaii), aircraft (Washington) and wood products (Oregon). Such dependent economies are vulnerable to threats as various as oil spills and Legionnaire's disease, or even the threat of world peace.

States	Employees
California	75,809
Washington	7,500
Oregon	6,384
Hawaii	1,514
Alaska	409
TOTAL	**91,616**

Leading Printers in Major Markets

Company, Location	Sales
ADVERTISING PRINTERS	**Total 390.7**
Graphic Arts Center, Portland, OR	45.0
Anderson Lithograph, Los Angeles, CA	30.0
George Rice & Sons, Inc., Los Angeles, CA	30.0
K/P Graphics, Berkeley, CA	23.0
Frye & Smith, Costa Mesa, CA	17.0
Penn Lithographics, Cerritos, CA	17.0
Welsh Graphics, Pasadena, CA	17.0
Madison/Graham ColorGraphics, Los Angeles, CA	15.0
The Dot Printer, Inc., Irvine, CA	14.0
George Lithograph Company, San Francisco, CA	14.0
United Graphics, Seattle, WA	13.5
Arts & Crafts Press, San Diego, CA	13.0
Franklin Press, San Bernardino, CA	12.0
Lithographix, Inc., Los Angeles, CA	10.5
Overland Printers, Inc., Hawthorne, CA	10.5
Rush Press, San Diego, CA	10.0
Alan Lithograph, Inglewood, CA	10.0
Muller Printing, Santa Clara, CA	9.5
Thomson Lithograph, Palo Alto, CA	9.0
Cal Central Press, Sacramento, CA	8.0
Trend Offset Printing Service, Los Alamitos, CA	8.0
Mariposa Press, Benicia, CA	8.0
Sinclair Printing Company, Los Angeles, CA	6.0
Warren's Waller Press, South San Francisco, CA	6.0
Gardner Lithograph, Buena Park, CA	5.5
Relief Printing Corp., Baldwin Park, CA	5.0
Craftsman Press Printing, Seattle, WA	5.0
George Rice & Sons, Inc., Seattle, WA	4.0
Fricke-Parks Press, Fremont, CA	3.5
Bert-Co Graphics, Los Angeles, CA	3.5
Smith Lithographic Arts, Inc., Tustin, CA	3.0
Sapir Press, South San Francisco, CA	3.0
Dynagraphics, Inc., Carlsbad, CA	2.2

Company, Location	Sales
INSERT PRINTERS	**Total 385.0**
Riverside County Publishing, Riverside, CA	85.0
GBP Industries, Pittsburg, CA	40.0
Sun Litho Inc., Van Nuys, CA	35.0
Treasure Chest Advertising, City Of Industry, CA	30.0
Rotary Offset Sales Company, Seattle, WA	26.5
RFD Publications, Tigard, OR	26.5
Treasure Chest Advertising, West Sacramento, CA	23.0
Treasure Chest Advertising, Pomona, CA	21.0
Treasure Chest Advertising, Portland, OR	20.0
Continental Graphics, Los Angeles, CA	16.0
Trend Offset Printing Service, Los Alamitos, CA	13.5
Wolfer Printing Company, Commerce, CA	8.0
California Offset Printers, Glendale, CA	7.0
Crest Graphics, Los Angeles, CA	7.0
Fricke-Parks Press, Fremont, CA	6.0
Andrews Printing Co., Lakewood, CA	6.0
Alan Lithograph, Inglewood, CA	6.0
World Color Press, Inc., Merced, CA	5.0
Warren's Waller Press, South San Francisco, CA	3.5
COMMERCIAL/SPECIALTY	**Total 346.8**
Scranton Corporation, Tustin, CA	34.0
George Rice & Sons, Inc., Los Angeles, CA	33.0
Pacific Lithograph Company, San Francisco, CA	30.8
Jostens Printing & Publishing, Visalia, CA	25.0
Continental Graphics, Los Angeles, CA	20.0
Fong Brothers Printing, Brisbane, CA	16.0
Sinclair Printing Company, Los Angeles, CA	13.5
Craftsman Press Printing, Seattle, WA	13.5
The Dot Printer, Inc., Irvine, CA	12.5
Lithotype Company, South San Francisco, CA	12.0
H. S. Crocker Co., South San Francisco, CA	11.0
Madison/Graham ColorGraphics, Los Angeles, CA	11.0
Pacific Envelope Company, Anaheim, CA	11.0

Company, Location	Sales
Avery International, Pasadena, CA	10.0
Anderson Lithograph, Los Angeles, CA	10.0
Graphic Arts Center, Portland, OR	10.0
Bert-Co Graphics, Los Angeles, CA	9.0
Madison/Graham ColorGraphics, San Francisco, CA	9.0
Franklin Press, San Bernardino, CA	8.0
Overland Printers, Inc., Hawthorne, CA	7.5
Relief Printing Corp., Baldwin Park, CA	7.0
Gardner Lithograph, Buena Park, CA	6.5
Lithographix, Inc., Los Angeles, CA	5.5
Alan Lithograph, Inglewood, CA	5.5
Cal Central Press, Sacramento, CA	5.0
Smith Lithographic Arts, Inc., Tustin, CA	2.5
George Rice & Sons, Inc., Seattle, WA	2.5
Riccobon Business Forms, Santa Fe Springs, CA	2.0
Advance Business Forms, Mira Loma, CA	2.0
Creative Web Systems, Inglewood, CA	1.5
MAGAZINE PRINTERS	**Total 283.8**
Arcata Graphics Company, San Jose, CA	55.0
R.R. Donnelley & Sons Company, Torrance, CA	50.0
GBP Industries, Pittsburg, CA	25.0
World Color Press, Inc., Merced, CA	25.0
Ringier America, Inc., Fullerton, CA	23.0
Continental Graphics, Los Angeles, CA	17.0
California Offset Printers, Glendale, CA	12.0
Treasure Chest Advertising, Pomona, CA	10.0
Treasure Chest Advertising, West Sacramento, CA	10.0
Wolfer Printing Company, Commerce, CA	10.0
Recorder Sunset Press, San Francisco, CA	7.5
Craftsman Press Printing, Seattle, WA	7.0
RFD Publications, Tigard, OR	7.0
Cal Central Press, Sacramento, CA	6.0
Crest Graphics, Los Angeles, CA	4.5
Dynagraphics Inc., Carlsbad, CA	4.3

Demographics in Pacific Region

Population and Migration

State	Population	Rank	Migration (See text)	Change (%, 80-86)
California	26,981,000	1	1,778,000	14.0
Washington	4,462,000	20	105,000	8.0
Oregon	2,698,000	30	−49,000	2.5
Hawaii	1,062,000	39	16,000	10.1
Alaska	534,000	49	71,000	32.8
TOTAL	**35,737,000**		**1,921,000**	

Sometimes it seems like every third person in the known world wants to live in California—and, from currently available migration figures, they seem to be making good on that desire in record numbers. In fact, all five of these states are seen as desirable places to live. The natives aren't entirely happy about that, and in fact, Oregonians quip they're going to change the state motto to "Go Away." (It is said that even in Alaska, which has a population density only slightly heavier than Mars, there are people who think it's getting crowded.) The populations of all these states are well

Potential Labor Pool

State	Age 15-24 (% Population)	Unemployment Rate (%)
Alaska	18.7%	10.8
Hawaii	17.9%	4.8
California	17.5%	6.7
Washington	16.6%	8.2
Oregon	15.5%	8.5

Tables of leading printers given in order of overall market size. This will vary from region to region.

Company, Location	Sales
Frye & Smith (Am. Signature), Costa Mesa, CA	4.0
Warren's Waller Press, South San Francisco, CA	3.5
Mariposa Press, Benicia, CA	2.0
Creative Web Systems, Inglewood, CA	1.0

BUSINESS FORMS PRINTERS	Total 260.3
Vanier Graphics Corporation, Santee, CA	63.0
Apperson Business Forms, Los Angeles, CA	32.0
Riccobon Business Forms, Santa Fe Springs, CA	22.0
Advance Business Forms, Mira Loma, CA	18.0
Wright Business Forms, Inc., Portland, OR	17.5
Sterling Business Forms, Central Point, OR	16.5
Block Business Forms, Portland, OR	16.0
K/P Graphics, Berkeley, CA	15.0
Avery International, Pasadena, CA	15.0
Wright Business Forms, Inc., Portland, OR	12.0
Five Day Business Forms Mfg., Anaheim, CA	11.8
Pacific Envelope Company, Anaheim, CA	8.0
Wright Business Forms, Inc., Kent, WA	5.5
National Printing Converters, Van Nuys, CA	5.5
Forms Engineering Company, La Palma, CA	3.0

LABEL/WRAPPER PRINTERS	Total 232.7
Avery International, Pasadena, CA	110.0
H.S. Crocker Co., South San Francisco, CA	42.0
GM Nameplate, Seattle, WA	19.0
Vanier Graphics Corporation, Santee, CA	13.0
Label-Aire, Inc., Fullerton, CA	9.0
Bert-Co Graphics, Los Angeles, CA	8.5
National Printing Converters, Van Nuys, CA	8.5
MPI Label Systems, Stockton, CA	8.0
Pacific Lithograph Company, San Francisco, CA	7.7
Bee Line Inc., Union City, CA	5.5
Sterling Business Forms, Central Point, OR	1.5

CATALOG PRINTERS	Total 232.0
Graphic Arts Center, Portland, OR	65.0
George Rice & Sons, Inc., Los Angeles, CA	27.0
Continental Graphics, Los Angeles, CA	25.0
Anderson Lithograph, Los Angeles, CA	20.0
R.R. Donnelley & Sons Company, Torrance, CA	15.0
World Color Press, Inc., Merced, CA	15.0
Craftsman Press Printing, Seattle, WA	9.0
Welsh Graphics, Pasadena, CA	7.0
Ringier America, Inc., Fullerton, CA	7.0
Frye & Smith (Am. Signature), Costa Mesa, CA	6.0
Wolfer Printing Company, Commerce, CA	6.0
Mariposa Press, Benicia, CA	6.0
Recorder Sunset Press, San Francisco, CA	5.5
Madison/Graham ColorGraphics, Los Angeles, CA	5.0
GTE Directories Press, Los Angeles, CA	5.0
California Offset Printers, Glendale, CA	3.5
Griffin Printing & Lithograph, Glendale, CA	3.0
Crest Graphics, Los Angeles, CA	2.0

DIRECTORY PRINTERS	Total 164.0
World Color Press, Inc., Merced, CA	70.0
GTE Directories Press, Los Angeles, CA	45.0
Norwest Publishing Company, Portland, OR	40.0
Ringier America, Inc., Fullerton, CA	5.0
Andrews Printing Co., Lakewood, CA	3.0
Griffin Printing & Lithograph, Glendale, CA	1.0

DIRECT MAIL PRINTERS	Total 138.0
Vanier Graphics Corporation, Santee, CA	31.0
K/P Graphics, Berkeley, CA	16.0
Penn Lithographics, Cerritos, CA	15.5
Anderson Lithograph, Los Angeles, CA	15.0
Forms Engineering Company, La Palma, CA	12.0
Krupp Taylor USA, Los Angeles, CA	11.5
Creative Web Systems, Inglewood, CA	6.5
Bert-Co Graphics, Los Angeles, CA	8.5
Advertisers Mailing Service, Paramount, CA	7.5
United Graphics, Seattle, WA	6.0
Madison/Graham ColorGraphics, Los Angeles, CA	5.0
Sapir Press, South San Francisco, CA	3.5

BOOK PRINTERS	Total 70.0
R.R. Donnelley & Sons Company, Torrance, CA	40.0
Delta Lithograph Company, Valencia, CA	16.0
Griffin Printing & Lithograph, Glendale, CA	7.0
Trend Offset Printing Service, Los Alamitos, CA	3.0
Andrews Printing Co., Lakewood, CA	2.0
Adapt Electronic Publishing, San Francisco, CA	2.0

PREPRESS	Total 50.0
Balzer/Shopes, Brisbane, CA	13.5
Walker Graphics (Techtron), San Francisco, CA	12.0
Techtron Imaging Network, Los Angeles, CA	10.0
Color House, Inc., Burbank, CA	8.0
Toppan Graphic Arts Center, Santa Monica, CA	3.5
Frye & Smith, San Diego, CA	3.0

Figures given for sales are in millions of dollars. Data taken from Printmarkets, Trade & Technology Press, Stamford, Conn.

If you'd like to rent the list of names of people in any of the printing establishments in this section, please contact Jim Long, Direct Mail Services, Cahners Publishing, 249 W. 17th St., N.Y., N.Y. 10011; or call 1-800-537-7930.

educated, with reasonably high per capita incomes.

Readers should note that the database from which these listings is drawn contains only major printers, that is, printers who have 20 or more employees and who have at least $1 million in annual sales in a particular market. Readers familiar with the Geography of Print series will notice that this month's list is noticeably smaller than some of its predecessors. The Pacific region, with certain notable exceptions (see list) has comparatively few printers large enough to meet the criteria for our listing.

Income and Bank Deposits

State	Income (Per Capita)	Rank	Bank Deposit Increase 1985–1986, %
Alaska	$13,650	2	6.3%
California	11,885	7	5.1%
Hawaii	11,003	16	11.6%
Washington	10,866	19	6.2%
Oregon	9,925	31	6.3%
U.S. Average	$10,797		9.0%

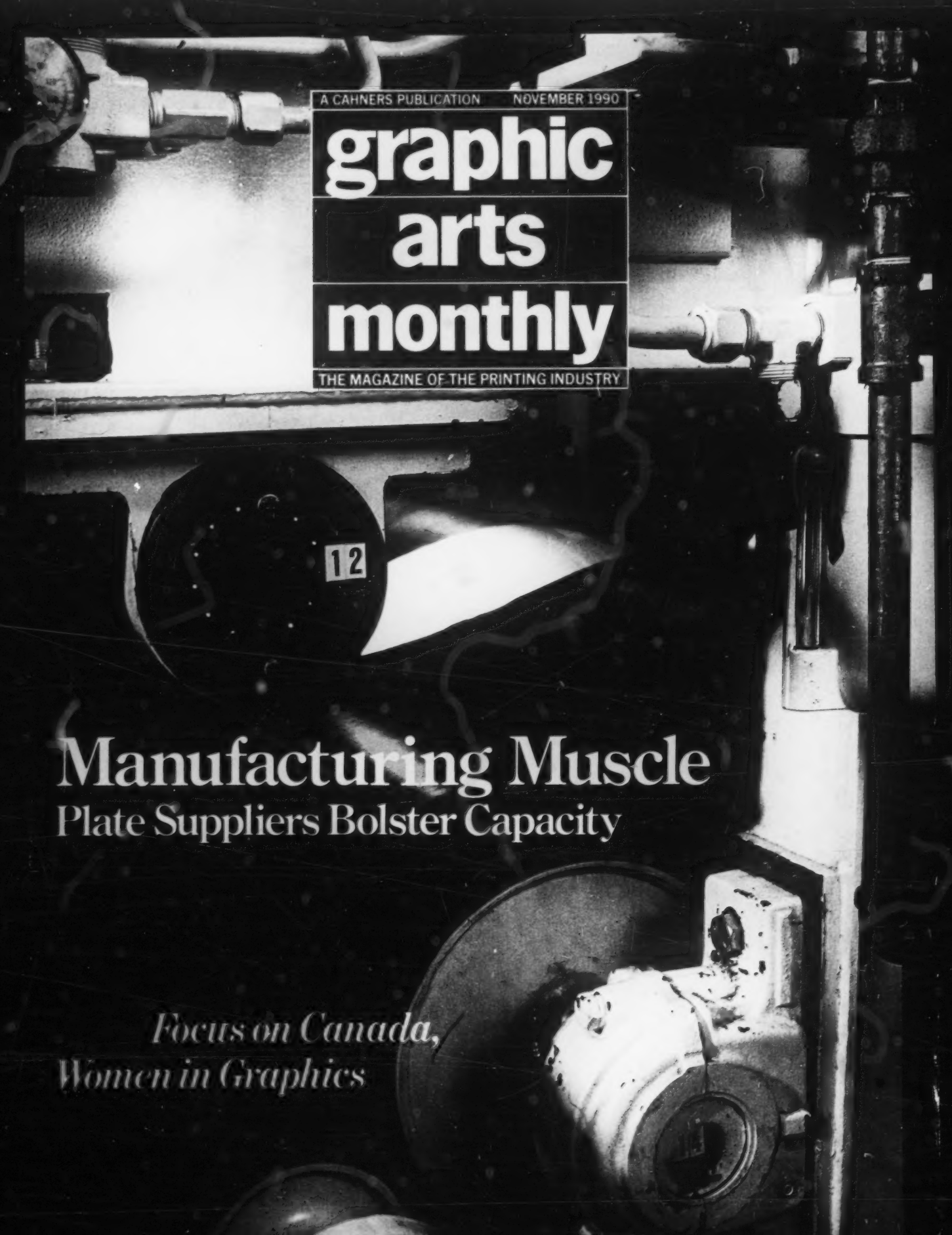
Educational Attainment

State	High School (12+ years)	College (16+ years)
Alaska	82.5%	21.1%
Washington	77.6%	19.0%
Oregon	75.6%	17.9%
Hawaii	73.8%	20.3%
California	73.5%	19.6%
U.S. Average	66.5%	16.2%

A CAHNERS PUBLICATION NOVEMBER 1990

graphic arts monthly

THE MAGAZINE OF THE PRINTING INDUSTRY



Manufacturing Muscle

Plate Suppliers Bolster Capacity

Focus on Canada,
Women in Graphics

VOLUME 62, NUMBER 11

A CAHNERS PUBLICATION NOVEMBER 1990

TOTAL CIRCULATION: 99,585

graphic arts monthly

THE MAGAZINE OF THE PRINTING INDUSTRY

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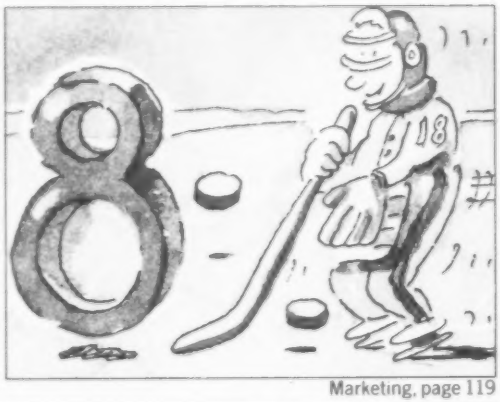

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Interest Rate Squeeze Prompts Dual Response

A weak economy is lowering the demand for consumer and business borrowing, putting downward pressure on interest rates. At the same time, concern over international oil availability has raised oil prices, increasing inflation and putting upward pressure on interest rates.

So far, short and long rates have responded differently to these competing pressures. Short-term rates have hardly moved at all since the Iraqi invasion, while long-term rates have increased over one-half a percentage point. Long-term rates are generally more sensitive to inflationary concerns, so more movement on this side of the market is not surprising.

The Federal Reserve Board is in a vise, caught between competing objectives of controlling inflation and promoting economic growth. Recently, the Fed announced it would tie interest rate changes to the Federal deficit reduction accord, effectively kicking its dilemma back to Congress and the Administration.

Long-term rates will remain volatile over the next few months. If the Middle East remains stable, a weak economy will pull down rates. Our forecast is for fixed-rate mortgages to gradually drop from their current levels of around 10.1% to around 9.75% early in 1991.

Short-term rates should ease a bit less over the next few months, but probably enough to pull adjustable-rate mortgages down to almost 8% by early next year. We also expect one more drop in the prime rate in the next few months, down to 9.5%. Following this drop, the prime rate is expected to creep back up to 10% by the end of next year.

The latest industrial production data shows all sectors of the printing and publishing industry improving over 1989. As of July, output of periodicals, books, and cards stood 5.6% above the same period last year, and output of job printing increased 3.9%. With the exception of newspapers, all sectors are headed for strong growth this year. Printing and publishing output is expected to gain 4.0%, as compared to 1.2% for total manufacturing. In 1991, printing and publishing should see a 6.5% gain, as manufacturing rises 3.0%.

GENERAL ACTIVITY INDICATORS

				Annual Percent Change			
General Economic Indicators	**Q2/89**	**Q1/90**	**Q2/90**	**1989**	**1990**	**1991**	**1992**
Gross National Product (1)	4112.2	4150.6	4155.1	2.5	1.4	2.4	2.2
Consumer Spending (1)	2645.3	2677.3	2678.8	1.9	1.0	2.0	2.1
Business Investment (1)	505.5	514.6	508.4	3.9	1.3	3.7	3.0
Industrial Production (2)	108.4	108.3	109.4	2.6	1.3	2.7	2.6
Prime Rate (3)	11.3	10.0	10.0	10.9*	9.8*	10.0*	10.5*
Consumer Price Index (4)	123.7	128.1	129.3	4.8	5.4	3.9	4.4
	July 89	**June 90**	**July 90**	**1989**	**1990**	**1991**	**1992**
Industrial Production (2)							
Printing & publishing	106.6	112.2	112.4	4.8	4.0	6.5	5.4
Newspapers	97.0	100.7	101.2	−0.6	1.6	2.1	1.5
Periodicals, books, cards	113.8	122.2	124.0	10.4	5.2	9.2	4.1
Job printing	104.4	112.9	111.6	4.3	4.5	8.9	6.7
Industry Shipments (5)							
Newspapers, books, periodicals	na	na	na	7.9	5.8	8.4	5.9
Other publishing & printing	na	na	na	4.2	10.5	6.2	5.8

(1) seasonally adjusted annual rate, billions of 1982 dollars. (2) index, 1987 = 100. (3) average percent. (4) index, 1982 = 100. (5) billions of current dollars.
na = data not available for publication. * = annual average
data source: U.S. Department of Commerce, Federal Reserve Board
all forecasts: Cahners Economics

graphic arts monthly

Canada

Americans (not a terrific word, since it really applies to everybody from Hudson Bay to Patagonia; unfortunately, we're stuck with it: "Yankee" is pejorative, and constructions like "United Statesman"—Gore Vidal's non-solution to the problem—are hopelessly clumsy) have a tendency to think of ourselves as being alone on the North American continent. It's not true; we are the most populous, richest, and noisiest nation on the continent, but we are not the only one.

Directly to our north lies the largest country in the Western Hemisphere (and the second largest in the world, after the USSR), Canada. The country sprawls across six time zones (east to west: Newfoundland, Atlantic, Eastern, Central, Mountain, and Pacific) and runs from Windsor, just across from Detroit, north to Ellesmere Island, which is damn near to the North Pole.

Canada is not only enormous, it is largely empty; there is no permanent settlement in approximately 89% of it. The population is 25,354,064 (1988 Statistics Canada estimate), or roughly 10% of the U.S. population; of these people, the vast majority live in a narrow belt along the southern border, and are concentrated in a few metropolitan areas (see inside for details).

The country is divided into 12 geographic areas, 10 provinces and two territories. From east to west, the provinces are Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia. The two territories are Yukon (north and slightly west of British Columbia) and the Northwest Territories. The Northwest Territories includes all of Canada north of the 60th parallel except for Yukon, bits of Quebec and Labrador, and the northern islands in Hudson Bay and James Bay.

Jana Brenning

More than 60% of the population lives in two provinces, Quebec and Ontario. Of that populace, 67% lives in Montreal and Toronto, respectively.

Canada has a thriving graphic arts industry. It is structured much like the U.S. industry, with a (relative) handful of very large companies and a much larger number of very small ones. In fact, relative to their populations the two countries have printing industries of almost exactly the same size. From 1985 to 1986, the last year for which complete statistics exist, the Canadian industry grew 8.8% in terms of manufacturing shipments (printing, publishing and allied industries together—see inside for a breakdown, figure unadjusted for inflation).

Data for this study come primarily from two sources, Statistics Canada (roughly equivalent to our Bureau of the Census) and *The Graphic Monthly*, an industry trade magazine published by North Island Sound Ltd., Mississauga, Ont. Thanks are also due to Dr. Joseph Webb of A.F. Lewis & Co., New York.

Reprints may be ordered from Carol Bien, Cahners Publishing, Reprint Department, 1350 E. Touhy Ave., Des Plaines, IL 60018.

By Peter Johnston
Special Projects Manager

Industry at a Glance

A Note on Statistics

The figures used in this overview of the economy and political geography of Canada as they relate to its graphic arts industry are taken from data provided by Statistics Canada, the nation's official gatherer of economic and demographic information. Roughly equivalent to the U.S. Bureau of the Census, Stats Canada has offices in every major city.

The most recent numbers for the Canadian printing industry were collected in 1986 and partially updated in 1988. For purposes of comparison and measurement of growth, some figures are available from 1982; in general, however, annual growth rates given in this article express a comparison of 1986 over 1985. As measured by consumer price index, inflation in Canada was heavy in the early 1980s, averaging close to 11% per year for 1980-82. Since then it has moderated considerably and is now a little over 4%. (U.S. inflation, which for political reasons is chronically underestimated by the Executive Branch, averages around 5%.)

A Note on SICs

Like the United States, Canada divides its industrial activity by a system of Standard Industrial Classifications, or SICs. Again like the United States, Canada has an overall SIC category called Printing, Publishing and Allied Industries known as Major Group 28.

Major Group 28 is broken down into subcategories—unfortunately not quite the same subcategories as the ones used in the U.S. The purely printing—as opposed to publishing—SICs in Canada are 2811 (business forms printing), 2819 (other commercial printing, i.e., not business forms) and 2821 (platemaking, typesetting, and bindery).

Those three SICs—in other words, printing as distinguished from publishing—account for 57% of the total sales of Group 28 (as expressed in terms of value of shipments; overall statistics are for 1986 unless otherwise stated). For purposes of comparison, in the U.S. printing makes up almost exactly half of SIC 27, Printing and Publishing.

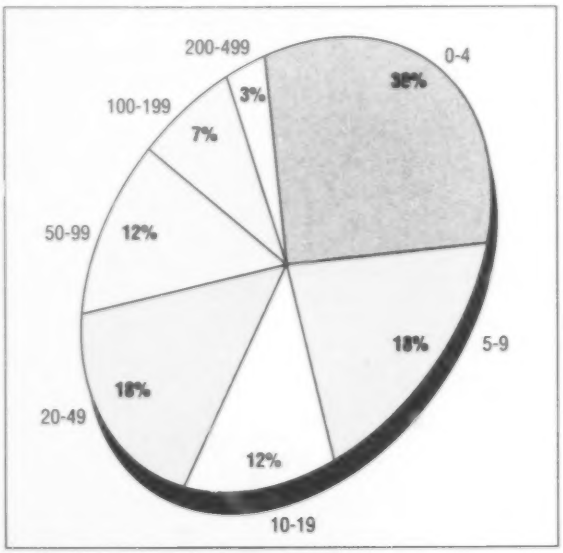
Internal Structure of the Industry

The Canadian printing industry is somewhat more concentrated than our own, perhaps due to the concentration of populace—in Canada you either have no people at all or you have a lot, it seems.

In the three printing SICs there are a total of 4,175 establishments, with sales (value of shipments) totaling $5.917 billion. (As all years here are 1986, all financial figures are in Canadian dollars. As we were going to press, the Canadian dollar was worth about $.86 U.S.) This is an average of $1.4 million per establishment, slightly higher than the average sale per printing establishment in this country. (Remember, all figures here given in Canadian dollars.)

By the same token, the average number of employees in Canada is 14.5—again, somewhat higher than is the case in the U.S.

Plants by Employee Count

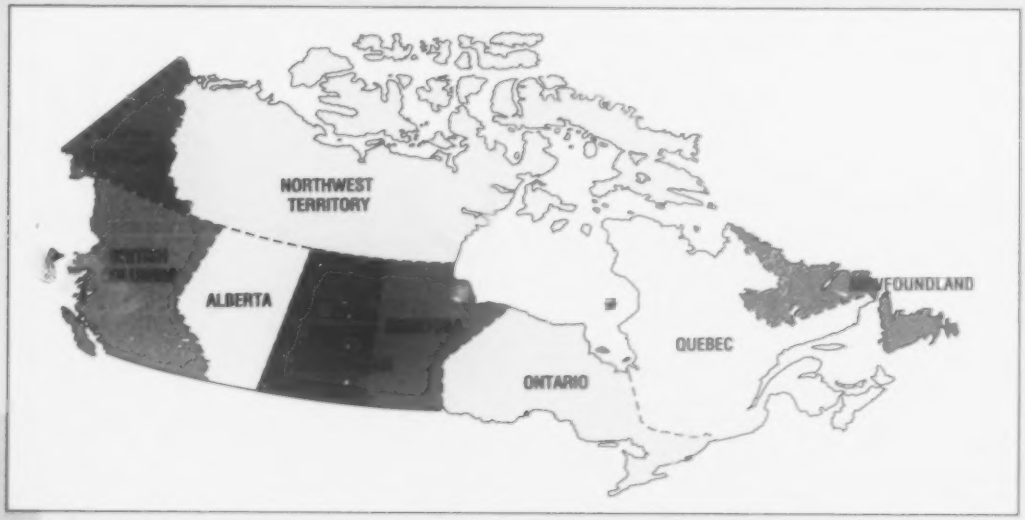


Lisa Hilgers

This breakdown, unfortunately, is based on a less than totally complete sample. As you can see from the accompanying list of major printers in Canada, there are in fact eight Canadian printing companies with more than 499 employees. However, it does give 80% with fewer than 20 employees, which tallies almost exactly with the averages in the United States.

Size	# of Plants	% of Total
0–4 Employees	1,883	45.1%
5–9 Employees	909	21.1%
10–19 Employees	577	13.8%
20–49 Employees	504	12.1%
50–99 Employees	173	4.1%
100–199 Employees	94	2.3%
200–499 Employees	29	0.7%
500–999 Employees	4	0.09%
1,000 + Employees	2	0.05%
TOTAL	**4,175**	**100%**

Printing in Canada



Population

Newfoundland	568,000
Prince Edward Island	129,000
Nova Scotia	884,000
New Brunswick	714,000
Quebec	6,639,000
Ontario	9,431,000
Manitoba	1,085,000
Saskatchewan	1,011,000
Alberta	2,401,000
British Columbia	2,984,000
Yukon	25,000
The Northwest Territories	52,000

Trade Shops (SIC 2821)

Newfoundland	3
Prince Edward Island	2
Nova Scotia	13
New Brunswick	12
Quebec	254
Ontario	481
Manitoba	26
Saskatchewan	32
Alberta	95
British Columbia	112
Yukon	*
The Northwest Territories	*

Commercial Printing Establishments (SIC 2819)

Newfoundland	22
Prince Edward Island	9
Nova Scotia	58
New Brunswick	43
Quebec	790
Ontario	1,317
Manitoba	111
Saskatchewan	66
Alberta	229
British Columbia	303
Yukon	*
The Northwest Territories	*

Total Manufacturing Industries—Establishments

Newfoundland	321
Prince Edward Island	141
Nova Scotia	820
New Brunswick	665
Quebec	10,653
Ontario	15,570
Manitoba	1,267
Saskatchewan	791
Alberta	2,536
British Columbia	4,062
Yukon & Northwest Territories	28

Business Forms Printers (SIC 2811)

Newfoundland	0
Prince Edward Island	0
Nova Scotia	2
New Brunswick	1
Quebec	65
Ontario	80
Manitoba	7
Saskatchewan	5
Alberta	22
British Columbia	15
Yukon	0
The Northwest Territories	0

As you can see, Canada rather clumps up in the middle. The asterisks in the listings for SICs 2819 and 2821 are not intended to imply that there are no printers or typesetters at all in the Yukon or the Northwest Territories. Even in Whitehorse or Yellowknife, the fine art of printing keeps a toehold amid the permafrost and the lichens. However, there aren't very many of them and they somehow evaded the notice of Statistics Canada. As anyone who has done research can attest, a certain number of the people you want to count will refuse to answer mailed questionnaires or otherwise fail to be recognized.

50 Largest Canadian Printers

Rank, Name, Location	Annual Sales (000)	Employees	Sales per Employee	Primary Products	CEO	Years in Business
1 **Quebecor**, Montreal	$757,000	6,200	$122,097	COM, BK, PUB	Jean Neveau	101
2 **Southam Graphics Group**, Toronto	585,921	4,300	136,261	COM, CAT, MAG	Michael Quinn	109
3 **Maclean Hunter Ptg. Division**, Toronto	353,000	3,649	96,739	COM, CAT, MAG	Matthew B. Fyfe John Greenhough	103
4 **Trans-Continental**, Saint-Laurent, Que.	306,038	2,432	125,838	COM, CAT, MAG	Cam Gentile	14
5 **Lawson Mardon**, Missisauga, Ont.	275,851*	1,532	180,059*	COM, SPEC	Lawren Madden Marcel J. Pilon	108
6 **Moore Business Forms Canada**, Toronto	270,000*	1,700	158,823*	BIZ	Ralph Waehner	105
7 **Jannock Imaging Companies**, Toronto	70,300*	700	100,429*	PREP	J.D. McLean	5
8 **Metroland Printing**, Mississauga, Ont.	70,000*	400	175,000*	COM, INS	John Baxter	10
9 **Cairn Capital**, Don Mills, Ont.	63,461	500	126,922	COM, MAG, SPC	D.M. Alloway	N/A
10 **Bowne of Canada**, Don Mills, Ont.	44,000*	350	125,714*	FIN	Rudi Steinmetz	6
11 **Datamark**, St. Laurent, Que.	41,500	350	118,571	COM, BIZ	Jeffrey Zunenshine	17
12 **Jones Box & Label**, London, Ont.	40,000	310	129,032	SPC	Thomas Morris	N/A
13 **Lancaster Business Forms**, Markham, Ont.	38,000	250	152,000	BIZ	Frank Heller	33
14 **Web Offset Publications**, Pickering, Ont.	30,000*	260	115,385*	COM, PUB	Chris Rudge	28
15 **Litho Prestige**, Drummondville, Que.	30,000	200	150,000	COM	Gilles Cerat	19
16 **Arthurs-Jones Litho**, Mississauga, Ont.	30,000*	170	176,470*	COM	Duncan McGregor	84
17 **Friesen Printers**, Altona, Man.	28,000	300	93,333	BK	David Friesen, Jr.	83
18 **St. Joseph Printing**, Toronto	27,150	165	164,545	COM	Tony Gagliano	34
19 **Haughton Graphics**, Scarborough, Ont.	26,000	175	148,571	COM	Charles R. Nash	36
20 **LGM Graphics**, Winnipeg	26,000	150	173,333	COM, MAG	K. George Grigaitis	101
21 **Metropole Litho**, Ville d'Anjou, Que.	26,000*	275	94,545*	COM, BK	John Cholette	30
22 **Safeguard Business Forms**, Mississauga, Ont.	25,000*	125	200,000*	BIZ	John K. Israel	23
23 **Litho Acme Group**, Montreal	24,000*	210	114,286*	COM, PREP	Guy Denault	28
24 **The Printing House**, Toronto	21,000*	426*	49,296*	QP, COM	Earl O'Borne	29
25 **Pollard Banknote Limited**, Winnipeg	20,695	195	106,128	FIN	Lawrence Pollard	83
26 **Photo Engravers & Electrotypers**, Rexdale, Ont.	20,610*	400	51,525*	COM, CAT	John Shaw	63
27 **Grenville Mgt. & Ptg.**, Don Mills, Ont.	20,176	240	84,067	COM	M.W. Burke	22
28 **Webcom Ltd.**, Scarborough, Ont.	20,000	177	112,994	COM	Warren D. Wilkins	14

Rank, Name, Location	Annual Sales (000)	Employees	Sales per Employee	Primary Products	CEO	Years in Business
29 **Imprimerie Gagne, Ltee,** Louiseville, Que.	20,000*	185	108,108*	BK	Jean Pierre Gagne	100
30 **H&S Reliance,** Toronto	20,000*	168	119,048*	PREP	James Davidson	44
31 **Herzig Somerville Limited,** Toronto	19,863	167	118,940	COM, PREP	Ernie Herzig	25
32 **Dollco Ptg.,** Ottawa	19,000	130	146,153	COM	G.B. Nicholds	34
33 **M.C. Graphics,** Saskatoon	18,700	180	103,889	COM, SPC	John Hudson	2
34 **McBee Systems Canada,** Toronto	17,500*	250	70,000*	BIZ	John Weedon	43
35 **Provincial Graphics,** Markham, Ont.	16,300	85	191,765	COM, SPC	John Warbutton	17
36 **Hemlock Printers,** Burnaby, B.C.	16,000	140	114,286	COM, BK	D. Kouwenhouen	22
37 **Beresford Box Co.,** Kitchener, Ont.	16,000*	150	106,667*	SPC	Dennis Beamer	26
38 **Mitchell Press,** Burnaby, B.C.	15,500	110	140,909	COM	Howard Mitchell	62
39 **Canadian Graphtec Ind.,** Markham, Ont.	15,240	140	108,857	COM	John H. Foley	14
40 **I.P.I. Graphics,** Scarborough, Ont.	15,000	140	107,143	COM	Ronald P. Burtch	5
41 **Informco Inc.,** Scarborough, Ont.	15,000*	165	90,909*	BIZ	David Stephens	39
42 **M.O.M. Printing,** Ottawa	14,332	135	106,163	COM	Powell Griffiths	27
43 **Imprimerie Cook Canada,** Montreal	13,600	140	97,143	COM	Ronald H. Cook	42
44 **Pierre des Marais,** St. Laurent, Que.	13,500*	125	108,000*	COM	Pierre des Marais II	60
45 **Tri-Graphic Printing,** Ottawa	12,500*	105*	119,048*	BK	Hazel Doane	22
46 **Bradbury Tamblyn & Boorne,** Richmond Hill, Ont.	12,000	65	184,615	COM	Gordon Tamblyn	11
47 **Emphasis Printing,** Burnaby, B.C.	12,000*	100	[illegible]0,000*	COM, SPC	F. Kouwenhoven	15
48 **Impact Business Forms,** Mississauga, Ont.	12,000*	100	1[illegible]00*	COM, BIZ	E.M. Del Grande	19
49 **Barker Cambria Press,** Mississauga, Ont.	12,000*	88	136,364*	COM, BIZ	Larry Barker	4
50 **Proving Graphics,** Scarborough, Ont.	11,500*	65	176,923*	COM	Paul Ventresca	23

Concluding Remarks

Canada is this country's largest trading partner. Culturally and linguistically it is similar in many ways to the U.S., a similarity that extends to its economy. Canada went through a boom in the past decade just as we did, with the same good and bad effects. (Housing prices in Toronto, for instance, rose 33.6% from May 1986 to May 1987.) The country's real GNP (called Gross Domestic Product in Canada) has been growing faster than that of the U.S., though it, like our own, appears to be slowing down.

As in the U.S., printing in Canada is somewhat more robust than the overall economy. In 1985, for instance, when the overall manufacturing sector grew 8.0%, printing and publishing grew 10.1%.

All money figures in this article expressed in Canadian dollars; as we were going to press, the Canadian dollar was valued at roughly $.86 U.S.

$10.00

A CAHNERS PUBLICATION DECEMBER 1990

graphic arts monthly

THE MAGAZINE OF THE PRINTING INDUSTRY

A Mixed Outlook For the New Year

Though Vulnerable, Printers Rely On Industry's Basic Strengths

Also: New Market in Mexico, 1991 Planning Guide

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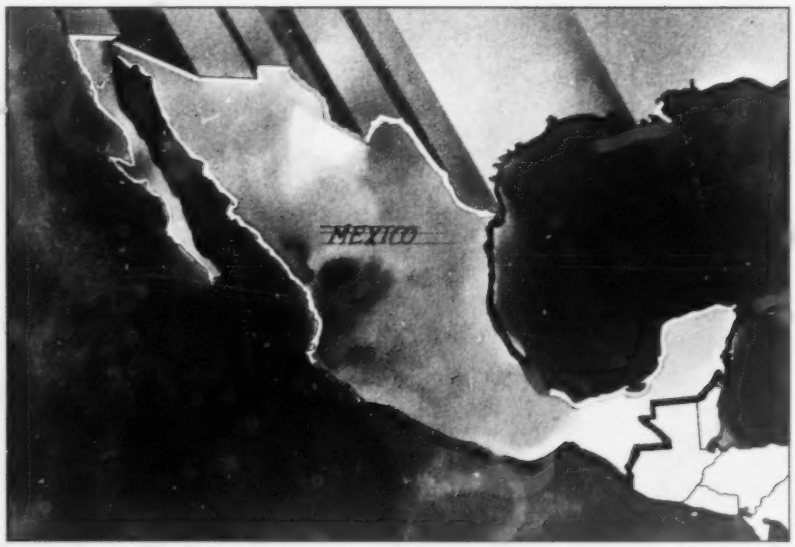
FEATURES



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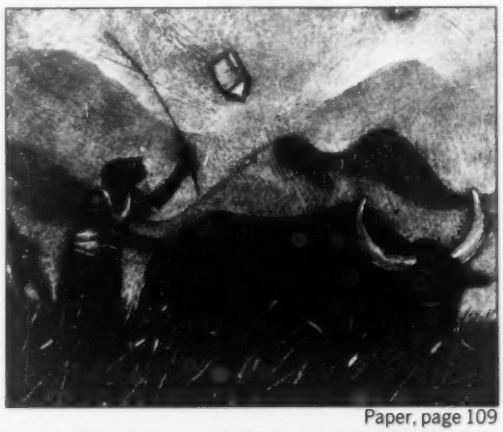

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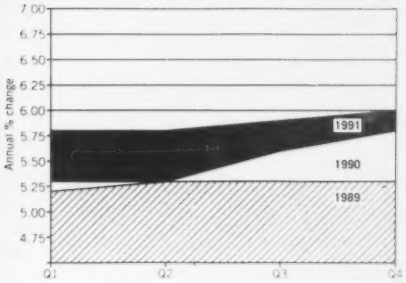
Slack Labor Force Growth Slows Unemployment



Employment growth in the U.S. has slowed substantially in recent months. Since the economic expansion began in late 1982, the economy has added almost 2.5 million new jobs a year. Over the past year, however, employment levels have been virtually flat.

Despite this slow growth in employment, the unemployment rate has remained low. The unemployment rate has ranged from 5.2% to 5.5%, only recently increasing as high as 5.7%. The reason unemployment rates have not risen more (with slow employment growth) is that the population looking for work has grown equally slowly. From third-quarter 1989 to third-quarter 1990, the civilian labor force in the U.S. increased a mere 0.8%.

The regions of the country seeing labor force increases well in excess of national trends are the Pacific Northwest and Oil Patch areas; the labor force in every state in these two areas is growing at, or well above, national growth rates. These regions are also supporting the fastest employment growth.

In the 12 months ending in August 1990, total nonagricultural job growth averaged 2.2% for the nation as a whole. On a state-by-state basis, growth ranged from a high of 7.9% in Nevada to a low of -2.8% in New Hampshire. States showing the fastest growth were those located primarily in the South and West regions, while those showing the slowest growth were the Northeast states.

Job growth has been led by the service sector. Over the past year, the service sector added 1.1 million jobs. This accounts for over half of the total employment increase of 1.9 million. Meanwhile, there continues to be an employment decline in the construction and manufacturing sectors. Moderate job growth has occurred in the transportation, retail and wholesale trade, and financial industries.

Paper prices continue to fall. Transaction price data shows prices of directory-uncoated groundwood, offset-uncoated white, and bond-uncoated white papers decreasing substantially. Expect downward pressure on paper prices through the beginning of 1991. Inventories relative to shipments shot up during the first half of 1990, indicating overproduction at the mills. Paper producers will be trying to trim stocks. As such, prices will remain at their current low levels for a while.

PAPER TRANSACTION PRICES

				Annual % Change		
Paper Category ($/ton)	**Q3/89**	**Q2/90**	**Q3/90**	**1990**	**1991**	**1992**
Newsprint—30 lb., East	$ 553	$ 535	$ 565	-2.1	6.6	-2.0
Directory—uncoated groundwood, 22.5 lb., white	780	753	800	-4.9	6.6	4.1
Supercalendered—uncoated groundwood, 34 lb.	830	800	800	-2.1	4.0	8.8
Offset—uncoated groundwood	635	635	645	-2.4	3.0	7.4
Offset—uncoated, white, 50 lb.	820	820	827	-4.2	1.1	8.3
Coated—No. 1, 70 lb.	1610	1610	1610	-0.1	2.5	6.5
Coated—No. 3	1250	1250	1250	0.3	3.4	9.0
Coated—No. 5, 34 lb. roto	965	940	940	-3.7	1.3	6.2
Bond—uncoated white, No. 1, 20 lb.	1100	1090	1090	-1.2	0.9	8.5
Bond—uncoated white, No. 4, 20 lb.	1040	900	900	-8.9	6.0	7.3

Source: Purchasing magazine's Transaction Pricing Service

graphic arts monthly

A Mixed Outlook For the New Year

In this spotty slowdown, printers rely on basic strengths of the industry.

Are we in a recession, or what? Our senses tell us that something is wrong. Printing sales are soft, people are nervous about signing contracts, and orders are smaller. But while business bad news is everywhere, many printers are busier than ever, and government preliminary economic reports for the third quarter showed dropping unemployment, rising auto sales, and surprisingly strong annualized GNP growth of 1.8%.

The simple answer is: no, we're not (technically) in a recession; it's possible we may not even get into one. But what we're looking at for 1991 is the makings of a spotty recession, varying by region and industry. For small-business industries like printing, which mainly operate on a local level, a big drawback of GNP figures is that they are averaged national aggregates; this means that, particularly in slow periods, if some regions or segments are doing well, others necessarily must be doing very poorly.

Moreover, GNP is only one yardstick, and because the term "recession" carries such an emotional charge, people's perceptions as consumers are crucial during a slow-growth period. To be sure, economic malaise can take various forms, so we don't have to undergo a bona fide recession to endure tough sledding.

By Bill Esler
Midwest Editor

Salem Krieger

Economists are divided on the near-term future of the printing industry.

In fact, we are now seeing a credit-crunch recession. Re-regulated bankers are tightening the reins and calling back lines of credit from businesspeople, who are, meanwhile, having a harder time than ever collecting from their customers.

We are also seeing a balance-sheet recession. Existing assets, particularly those based on real estate, are dropping in value. This makes businesses poorer on paper, even without a drop in sales.

The general consensus is that, over the next year, the printing business, like the nation's business as a whole, can expect to contract even further; sometime late in 1991 or early in 1992, it will spring back. Timetables follow two very divergent scenarios—one upbeat, the other rather less hopeful; both predict a rainbow at the end.

Additionally, conversations with economists, financiers, and printers yield three very different points of view.

Printers' comments tend to side with Peter Whiteside, president of Northern Banknote, a 100-year-old intaglio printer in Countryside, Ill. Whiteside notes, "I'm not an economist. I'm just a person trying to make a profit and keep a business running. It's a tough business, but I'm very happy I'm in a niche. I would like to expand that niche." He expresses a fundamental faith of all printers: that well-run businesses will persevere through the downturn, and prevail with recovery.

(Continued on p. 48)

In fact, printers believe the answer to recession is to set a goal of expansion while pruning back on costs.

"Everybody is very conservative in their outlook for next year," says Thomas Watson, president of Paramount-Miller, Jacksonville, Fla. "It's a function of concern over the Middle East, the economy in general, and more dissatisfaction and concern that Washington doesn't seem to recognize that business conditions aren't so red hot."

Printing industry economists, who were contacted in October and November, are mostly hopeful. Gathering data from the industry itself, and laying it against a backdrop of the macro economy as a whole, these forecasters see underlying strengths that may elude the untutored eye.

Printing trails the ups and downs of the general economy by as much as a year, according to current information. Downturns are felt later in the cycle, as are recoveries. But this connection may be changing.

"If you look at the 1973-75 recession, there was a downdraft in printing. In the 1981-82 recession, you don't see any downdraft; you see a sideways movement in output," says Michael Paslawskyj, vice president of Economic Research for the CIT Group, Livingston, N.J. "I don't know at this point whether commercial printers are in a new regime, meaning they have become counter-cyclical and aren't going to be affected by recession, or whether that was a unique circumstance."

Paslawskyj says printing may be the cost-effective alternative to broadcast media, and that, in a recession, can improve its share of the media dollar.

It could also be that printing moves quickly to the busiest points of a mildly contracting economy, shielding itself from the extremes suffered by, say, steel and automobiles. Printing is also one segment of the economy that straddles strongly growing services and more stagnant manufacturing. Its performance in the coming year will bear out the truth of these theories.

"Everybody is very conservative in their outlook for next year."
Thomas Watson, President, Paramount-Miller

Printing has been growing half again as fast as the GNP because of its key role in selling goods and services, packaging them, and documenting them. In the last two decades it underwent a massive structural change; the shift in the 1970s from letterpress to offset and the evolution of computer prepress in the 1980s are the outward signs of a movement to more productive manufacturing.

By 1989, the Department of Commerce found that, as a percent of value of industry shipments, wages of production workers had dropped remarkably, from 24% to 18%, versus what they were in the early 1970s. Printers had thus become more efficient through their use of modern equipment (and wages did not rise as fast as did other costs).

But printing still operates within the economy as a whole, and printers are reporting reduced growth and flattening sales, lower margins, and competitive pressures. The principal engine is advertising, which accounts directly for 60% of the industry's volume.

"And advertising revenues revolve around psychology," says the Department of Commerce's Bill Lofquist, "psychology in the form of hard statistics: gross sales and corporate profits."

From these are calculated advertising budgets for the following year; hence printing, like advertising in general, trails the economy, since its principal base is funded by last year's results, interpreted into this year's budget.

"Things have not been as bad as others projected," says Lofquist, who's perpetually optimistic, and believes the 1990 growth rate for printing will be around 3%. For 1991, he predicts a 3.5% growth rate, a figure founded on belief in a strong recovery in the second half.

"I'll admit that the magazine industry is somewhat sour, but catalogs and direct mail have done reasonably well," Lofquist says. While financial printing is a mess, "Yellow pages have been continuing strong, and directories in general are strong." Also doing well are label printing and hardback books, particularly for export.

A major element in all this is consumer confidence. "The world hates uncertainty," Lofquist notes, "especially advertisers." Earlier this fall, there was rampant uncertainty about the federal budget and escalating oil prices and interest rates.

Naturally, consumers and businesses drew back. National advertising is perhaps contracting more than local advertising, though direct marketers made a broad push to capture the holiday shopping surge.

"Advertisers themselves aren't saying what they might do," notes Barbara Gora of the press manufacturer Rockwell International, in Chicago. "They all seem to be waiting to see what their competition will do. If they get strong sales from holiday mailings, they will probably continue to promote in the spring. It seems like advertisers are using one season to make some next-season decisions." Gora says press sales have tightened for larger equipment, expanded for smaller equipment.

Despite these uncertainties, and pessimistic statements from many quarters, "We're still not forecasting a recession by technical terms," says Deborah

Selsky, an economist with Cahners Publishing, Newton, Mass. Three consecutive quarters of negative growth, the official signal of a recession, have not been seen, though with 0.4% GNP second quarter, the economy wiggled around zero growth. On the other hand, those who remember the 1986-87 period recall economists forecasting a recession that never happened.

One strong factor remaining is exports, assisted by the weakened dollar, which makes U.S. goods a bargain. Book exports are doing well, says Selsky, registering double-digit growth, as well as all the other goods that required printed documentation.

The downturn, which Selsky sees as regional and spotty, will not hurt direct-mail printing: "Direct mail is a very successful marketing method." For the economy in general, interest rates will drop and stimulate business. "Once that happens and people start to gain more confidence in the economy, businesses will become more confident, and it will give them incentive to start making investments and do some buying again," Selsky says.

Other favorable factors: low unemployment and low inventories. "It's not just the past quarter that the economy as been slow," says Selsky. "It's been slow for more than a year. Businesses are prepared. They aren't carrying huge inventories."

Economist Ron Davis from the Printing Industries of America, Alexandria, Va., said in October, "The economy is probably going to have negative growth in the fourth quarter, sort of a mini-recession, then start to climb out of it by first quarter 1991."

Though he called it highly unlikely, Davis did describe a worst-case scenario arising from a shooting war in the Mideast and $50-per-barrel oil. "Printers would have a very tough time of it. The probability is unlikely, but it's time for printers to do whatever they can to make certain they have their finances under control, plus some safety net if their sales turn down."

A war and a sustained jump in oil prices would cause a downturn through 1991. (The latest thinking is that even a war would not prevent the Saudis from pumping enough oil; they have already met the shortfall caused by the blockade of Iraq/Kuwait.)

A recession could work to the advantage of printing, as its more targeted vehicles become the method of choice for agencies and promoters. That's the thinking of Andrew Paparozzi of the

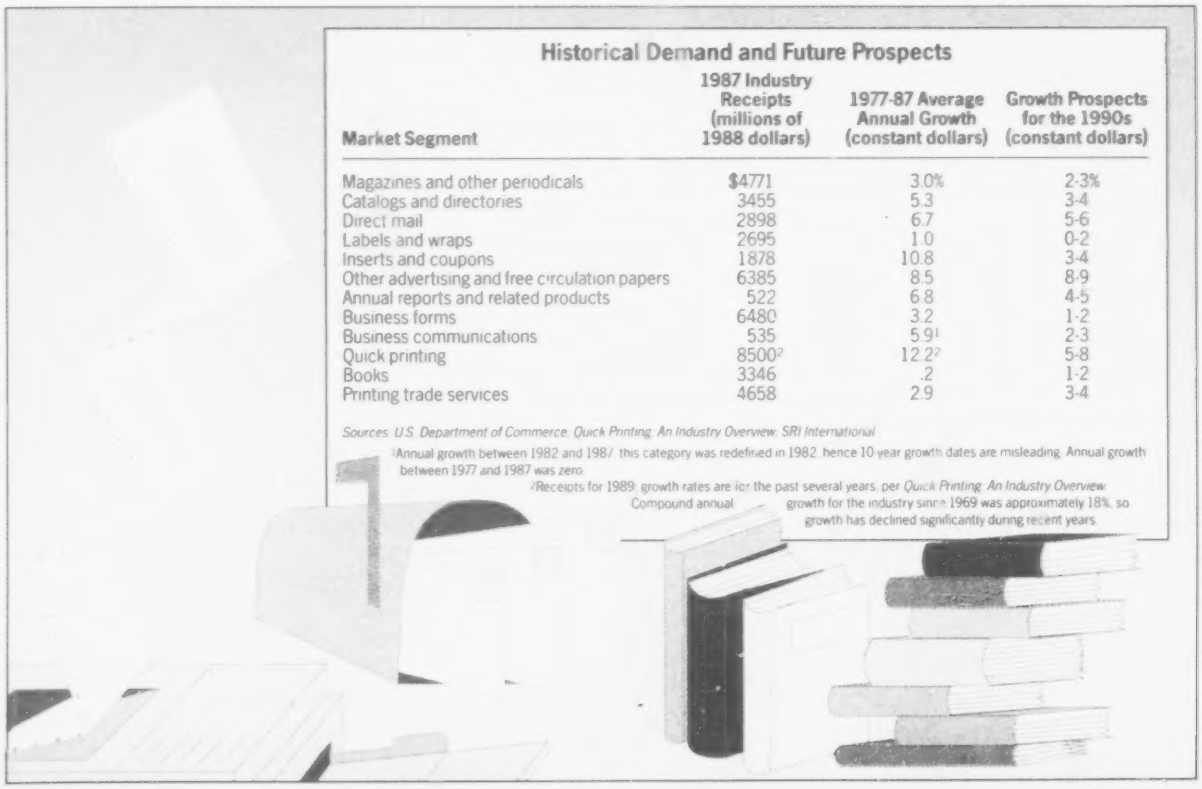
Historical Demand and Future Prospects

Market Segment	1987 Industry Receipts (millions of 1988 dollars)	1977-87 Average Annual Growth (constant dollars)	Growth Prospects for the 1990s (constant dollars)
Magazines and other periodicals	$4771	3.0%	2-3%
Catalogs and directories	3455	5.3	3-4
Direct mail	2898	6.7	5-6
Labels and wraps	2695	1.0	0-2
Inserts and coupons	1878	10.8	3-4
Other advertising and free circulation papers	6385	8.5	8-9
Annual reports and related products	522	6.8	4-5
Business forms	6480	3.2	1-2
Business communications	535	5.9[1]	2-3
Quick printing	8500[2]	12.2[2]	5-8
Books	3346	.2	1-2
Printing trade services	4658	2.9	3-4

Sources: U.S. Department of Commerce; Quick Printing: An Industry Overview; SRI International

[1]Annual growth between 1982 and 1987; this category was redefined in 1982, hence 10-year growth dates are misleading. Annual growth between 1977 and 1987 was zero.

[2]Receipts for 1989; growth rates are for the past several years, per *Quick Printing: An Industry Overview*. Compound annual growth for the industry since 1969 was approximately 18%, so growth has declined significantly during recent years.



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National Association of Printers and Lithographers, Teaneck, NJ. But he also warns about the credit crunch and issues of high leverage: "Everyone says you should expand advertising in a down market. Of course you should, but if every dime you have is going to pay off debt, you don't have the luxury of advertising."

Acquisitions experts tell their part of the story with a different ending. For them, the next year or two will be busy. "Printing sectors operating at minimal profit margins will see a lot of struggling companies," predicts Skip Serell, an investment professional with Keeley Management Co., Philadelphia. With general commercial business dropping 15% to 20%, as it may for awhile, Serell feels the leverage that these printers characteristically have begins to work against them.

For niche players with higher profit levels, things will be tolerable, though for publication printers and manufacturing-linked packaging and labeling, business will be soft. "But commercial printers operating at tight margins will have a tough year," Serell says.

He predicts a downturn through next year, possibly as long as 36 months. "With the statistics the government is publishing, they are kidding themselves," he says. "They say the economy grew 1.8% last quarter, but that's not what is happening in real time."

Some feel a broad-based downturn began this quarter, and will continue through June. Recovery will follow, permitting the year to break even. Afterward, a period of several years of sustained growth will follow.

Unknown factors—war in the Mideast, Fed policy, foreign investment in U.S. treasury bills—will affect the depth of the downturn, perhaps extending and deepening it. But afterward, recovery will be equally strong.

"The world hates uncertainty, especially advertisers."
Bill Lofquist, Department of Commerce

The most pessimistic viewpoint sees an extended contraction of the economy, as the nation's economic ills collapse upon themselves. The credit crunch, worsened by banks under tighter scrutiny, could slow down business all over.

Consumer confidence, having taken a nose dive, will continue downward, as thousands are laid off by continuously weakening sectors of the economy, the negative effects rippling through businesses in widening circles. This could result in a couple of years of tough going, after which a leaner business climate and work-hungry population bring business back to life.

But the scenarios are nothing more than educated guesses. No one is certain what will happen and when.

A recession can be fed by rumors that snowball into self-fulfilling prophecy. The mechanic here is consumer confidence, walking hand-in-hand with business confidence. When consumers hold back, sales fall sharply. Business plans get curtailed. Ad budgets are cut back, and even current expenditures, though budgeted, are quickly cut.

Another matter worth considering, too, is the impact of the cost of environmental concerns on direct manufacturing costs. Batten down the hatches, advises Keeley Management's Serell, adding, "By and large, my printing clients don't read the handwriting on the wall early enough. Their options begin to close at an accelerated pace."

Also during 1991, look for acquisitions and market expansion. There will be bargain prices on used equipment, and marginal printing companies will be looking to sell.

"Among the people we survey, you see people not only protecting themselves, but actually thriving," says NAPL's Paparozzi. They take advantage of the downturn to grab market share and to add personnel. "In my mind, a manager's litmus test is being able to take the company out of a downturn stronger than it went in. And there are printing managers doing just that."

"Those in the catbird seat have a broad base of printing abilities, good management, and cash in the bank," says Serell. Accept the inevitable and sell now rather than later. "For the marginal players, they should come to grips earlier with a plan." Trying to tough it out against great odds means only that your company's value will erode.

Acquisitions consultant Jerome Van de Water advises marginal printers to keep in mind the potential length of the coming downturn. "Would you like adverse effects to be reflected in your balance sheet when it comes time to sell?" he asks rhetorically.

Van de Water, who works with Heller Equity Capital Corp., Chicago, says he seeks out niche players with good fundamental business strengths, mostly in the packaging related businesses. Compared with a printer going it alone, "We're in a better position to ride out a slight downturn," he says of Heller's backing.

Two things making business acquisitions attractive now are the relatively low cost of capital and the tractability of labor. "Workers are recognizing that now is not the time to make big changes," he notes. "And interest rates have not gotten out of hand." This permits buyers of all stripes to offer healthy deals for businesses ready to sell.

"There are deals out there, bargains," advises CIT's Paslawskyj. "You will see some in-

crease in bankruptcies among printers. There could potentially be some bargain-basement prices out there for equipment."

Cahners economist Selsky advises printers not to rely on traditional markets. "Go out and get new business from new sectors, the growing sectors," she advises. Keeley Management's Serell agrees. "There certainly are pockets that are going to do quite well. The food industry will continue to do quite well, and there is a lot of printing associated with it. The pharmaceutical and health care field will do well. It's the low-end manufacturing businesses that will have trouble."

Though the printers we interviewed figured on making progress during the pending downturn, "We won't all be okay," cautions David Dillon of Meyers Printing, Minneapolis. "Everybody figures it's going to be somebody else's lunch that'll get eaten." Survivors will be better businesses, operating more efficiently, producing better quality. "I guess that's what it's all about," Dillon says.

For all the dire predictions, printers around the country are surprisingly hopeful. A random phone survey among major regions found that printers expect to make the most of 1991.

The Northeast is described as fully recessionary, a situation it entered months ago. "All the things that were making the economy grow just stopped," says James Haughey, vice president of research and economics for Cahners Publishing.

Concentrations of financial printers in New York have suffered mightily with declining stock business and the eroding earnings of banking and finance business. With its eastern location, however, Peake Printers of Hyattsville, Md., is doing okay, even though, "Our sales have declined," says Jay Rupard, president.

The 180-employee company, with sales of $27.5 million, finds customers scaling back. "What was six colors is now four. Instead of 48 pages of notes before getting to the financial pages, annual reports now carry 24. This means the profitability of any given job has been reduced. We're not in the red; we're just not operating at the same level of profitability as we were a year or two ago," Rupard reports. He expects tough times until the beginning of 1992.

Yet Peake is proceeding with its capital investments, having appropriated $3 million for a seven-unit sheetfed press, desktop publishing services, and a color prep system. "The market hasn't stopped us," says Rupart. "When things really get rolling again, you're going to have to be ready for it."

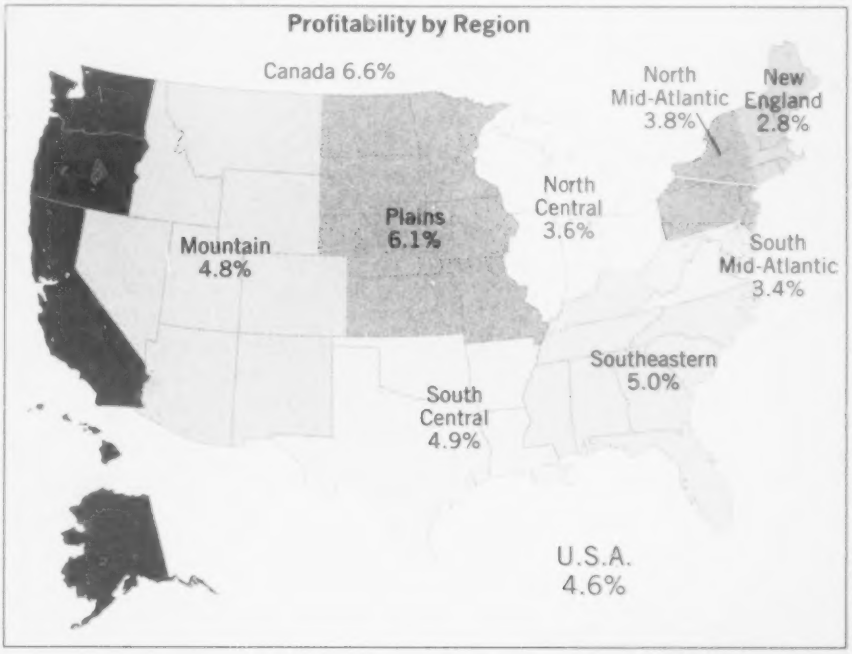
Rupart will cut some overhead, reduce overtime, and offset declining sales with increased productivity. "But as far as technology is concerned, you're either in the game or you're not."

The oil-patch states are only just recovering from the oil price crashes of the 1980s. The oil-price rises of late have been incidental to this improvement, which is more fundamental, since the region has been diversifying.

For 45-employee Katz & Lee Printing, a commercial shop in Irving, Tex., "Business has been good the last few months," reports Norman Hartman, sales vice president. "The overall year is up a little bit. Companies are still moving into the Dallas area."

Hartman says his company is pushing aggressively for business: "We're going to get our fair share out there." But equipment additions and expansion are on hold for now, except perhaps for some new prepress equipment.

Meanwhile, the Northwest is booming. Trade with Asia and the rise in aerospace sales will keep the economy stable through next year. Boeing in Seattle is said to have 10 years of



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contract backlogs. Seattle's United Graphics, with 100 employees, is doing well, and Charles Steeley, president, finds that his own experience differs from what he reads in the papers.

"We've been busy through 1990," he reports. "While many printers may not be doing business directly with Boeing, the company obviously has an influence on the overall economy here. There are high-tech businesses in the area that are very successful, and this has a positive influence on the business of the printers.

"The 'doom and gloom' in the news, some believe, is a self-fulfilling prophecy," Steeley continues. "I don't sense it. But the stories are going to affect business, because people are going to tighten up and pull back. I'd say everybody is moving cautiously forward, without any idea of what may be ahead of us."

In the Southeast, business is seen as stable, but recession is looming, the result of real estate woes. Population growth, which fueled expansion in the mid-'80s, has dropped off. Yet the selection of Atlanta for the 1996 Olympics, rebuilding from Hurricane Hugo, and the perpetual draw of Disney World will help salve these difficulties.

Thomas Watson, president of Paramount-Miller in Jacksonville, Fla., says things are very competitive. "I don't see a lot of real strength anyplace. Projects are there, but everybody is having a budget squeeze. It's very competitive: people want it better, faster, cheaper. I can't honestly say whether pent-up demand exists and people are sitting on their hands, loathe to spend money," Watson says. His $10 million company specializes in annual reports, promotional advertising, and financial printing.

In the Midwest, the economy is still strong, relying on exports of farm products, machine tools, and manufacturing equipment, particularly to aid the rebuilding of Eastern Europe. The weakened dollar is a boom for exports. Five Ohio cities were listed among the 10 fastest-growing metropolitan areas during the second quarter.

"We will be doing our small part to improve the economy."
David Dillon, President, Meyers Printing

Midwestern printer Hiram Phillips, Springfield, Ill., says his market is stable. "I expect to do very well next year in terms of volume," says the president of Phillips Brothers. Printing books and directories, mostly for universities, Phillips' 110-employee company enjoys a consistent economic base strongly tied to state government. "We're a fairly stable area because we have almost no industry, and are dependent on government. That just goes on and on."

Further north, Meyers Printing in Minneapolis expects to proceed with an aggressive expansion plan that includes a new 187,000-sq-ft facility, and new equipment. President Dillon says Meyers has two niches: flexo and letterpress labels, and high-quality sheetfed printing. Dillon predicts company sales will grow $2 million, to $26 million, next year.

"If we are just one example of the economy in general," says Dillon, "during the next year, muddling along, we will, in fact, improve our quality and our productivity. We've got some more automated equipment coming, and we're busy working on statistical process control. We will be doing our small part to improve the economy."

Despite pessimistic outlooks, which Dillon says are "essentially accurate," he is bullish on the long-term prospects. "I look forward to no growth in the economy for the next year, and I would expect a return to growth after that. I'm a real believer in the peace dividend, the ending of the Cold War, and the ending of the need to spend hundreds of millions of dollars on the military."

Two larger printers, with more diversified customer bases than most, speak from a platform of great financial stability. Quebecor's Dennis Meyer, sales and marketing vice president, acknowledges a softening in the economy. "Printing has a reputation for being somewhat recession-proof," notes Meyer. "I expect that will again be the case. But some printers are already on the edge and may be forced out. Those with the strength and the resources to weather the storm will emerge stronger."

At Bertelsmann's Berryville Graphics, Wayne Taylor was recently named president. "We're optimistic," he says. Having recently launched the Kid Print division to make thin hardbacks for children, he says, "Our capacity doesn't require a significant change in the marketplace to fill up. Although I anticipate a flat market for next year, there are enough opportunities for us to meet our volume plan for Berryville Graphics."

He adds, "The biggies of the industry will certainly weather the storm. But the organizations that are highly leveraged—printing companies that were purchased through LBOs or radical and aggressive buyouts where there is a lot of debt to service—they're going to find themselves in trouble."

The bottom line for '91: leveraged firms are particularly vulnerable, but well-run businesses will persevere through the downturn, and prevail with recovery. Having a specialized niche market as your main source of business won't hurt, either. But mainly, we'll all just have to grit our teeth and bear it.

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Mexico

Despite an ocean of distance, Americans seem fixated on Europe—on Eastern bloc countries converting to free-market economies, and on 1993 when a widespread relaxing of borders and trade restraints in the European Economic Community is to create a sort of United States of Europe.

But recent rapid developments much closer to home, in Mexico, with whom the U.S. has a 2,000-mile-long border, may well set the stage for a three-nation North American trading bloc that, for the U.S., is full of economic potential.

Mexico is already America's third-largest trading partner after Canada and Japan; mainly as a result of quick, effective moves by the two-year-old presidency of Carlos Salinas de Gortari, the country appears ready to make the most of its geographic location, its proximity to the world's largest and richest market, and the number, skill level, and pay scale of its eager but underutilized labor force.

Changes in Mexico are as fundamental as the better-known process of *perestroika*. The country has been run by the Institutional Revolutionary Party since 1929; until recently, it had a heavily socialized economy, coupled with stiff restrictions on foreign ownership and a protectionist tariff schedule, which made doing business in Mexico difficult.

This isolationism is easy to understand in light of Mexico's history. The year 1992 marks the 500th anniversary of the arrival of Christopher Columbus, and thus Europe, in the Western Hemisphere. Columbus was followed in short order by a swarm of adventurous Spaniards seeking the same thing he was: gold. One of the more aggressive of these *conquistadores* was Hernan Cortes, who dropped anchor at the site of present-day Vera Cruz, less than 20 years after the first voyage of Columbus.

Jana Brenning

The subsequent turmoil in Mexico lasted 400 years, during which time it suffered, not only alternating home-grown dictators and revolutionaries, but invasions and incursions. Also during this time, certain tendencies toward pessimism and isolation began to manifest themselves in the Mexican character.

But now the country is opening up, both as a manufacturing site for foreign investors, and as a consumer market. The natural tendency is to think of Mexico as part of the new North America; total population of the three partners, based on 1989 data, is 362 million, with combined gross product of $5.9 trillion, and total trade of $225 billion.

Data for this report were extracted from a number of sources. Principal among them were the Mexican Government and Banco Nacional de Mexico. Information on U.S.-Mexican trade balances was taken from an article by Paul Dacher in *Business Maerica*, April 23, 1990, Copyright U.S. Government Printing Office. Information on the Mexican printing industry comes from a report prepared by Caroline Verut of the U.S. Department of Commerce's United States Trade Center in Mexico City.

Reprints of this installation of the Geography of Print may be ordered from Carol Bien, Cahners Publishing, Reprint Department, 1350 E. Touhy Ave., Des Plaines, IL 60018.

By Peter Johnston
Special Projects Manager

Mexico: A Period of Growth

With an area of 760,373 square miles, Mexico is the 13th largest country in the world and the fifth largest in the Western Hemisphere (after Canada, the U.S., Brazil, and Argentina).

The country's 1990 population is somewhere between 86 million (Banco Nacional de Mexico) and 90 million (Mexican federal government). By population it ranks 11th in the world, and third in the Americas (after the U.S. and Brazil).

Mexico has a population density of 40 inhabitants per square kilometer, slightly above the world average of 38. This in itself is not bad news, but the problem regarding the Mexican population is its distribution and growth. Improvements in nutrition and medical care after World War II drastically reduced the country's mortality rate; this, combined with an unusually high birth rate, caused population growth that at its peak in the 1960s was 3.5% per year. As a result, between 1950 and 1970 the population of Mexico almost doubled (the annualized growth rate has since eased to about 2.2%).

This was coupled with a massive migration from the countryside to the cities, a population movement sparked by industrialization and aggravated by the persistent drought cycle of the 1950s.

The land, finally, suffers from a shortage of water. Most of Mexico rests on a high plateau between the two arms of the Sierra Madre range; only 14% of the land is considered arable.

As pointed out in the accompanying discussion of the Mexican economy, the country has managed to survive an extremely difficult period and seems to be poised to become a major player in the world economy. Indeed, it is not an exaggeration to say that the possibility exists for Mexico to follow the path of other countries that moved from poverty to industrial wealth in recent decades. True, the country has an isolationist tradition, is crowded, has a deeply entrenched ruling party, and suffers from a shortage of good farmland.

Exactly the same things are true of Japan. And, also like Japan, Mexico's population is a major resource. Though there is room for much improvement, it is a surprisingly well-educated populace; 65% of Mexicans between the ages of five and 24 go to school, and there are more than a million teachers. The average educational attainment of the populace older than 15 is 6.3 years, and illiteracy is estimated to be less than 3.5%. While only about 5% of the populace are university or technical school graduates, the country has an extensive network of well-regarded (and inexpensive) universities and technical schools.

The United States of Mexico

State	Capital	Population
Aguascalientes	Aguascalientes	703,300
Baja California	Mexicali	1,418,100
Baja California Sur	La Paz	328,300
Campeche	Campeche	614,800
Coahuila	Saltillo	1,941,700
Colima	Colima	427,800
Chiapas	Tuxtla Gutierrez	2,555,900
Chihuahua	Chihuahua	2,265,400
Durango	Durango	1,399,400
Federal District	Mexico City	19,479,000
Guanajuato	Guanajuato	3,594,700
Guerrero	Chilpancingo	2,595,300
Hidalgo	Pachuca	1,842,900
Jalisco	Guadalajara	5,278,000
Mexico	Toluca	12,114,900
Michoacan	Morelia	3,412,500
Morelos	Cuernavaca	1,291,000
Nayarit	Tepic	858,400
Nuevo Leon	Monterrey	3,220,000
Oaxaca	Oaxaca	2,661,300
Puebla	Puebla	4,127,700
Queretaro	Queretaro	975,300
Quintana Roo	Chetumal	416,700
San Luis Potosi	San Luis Potosi	2,049,400
Sinaloa	Culiacan	2,424,200
Sonora	Hermosillo	1,837,100
Tabasco	Villahermosa	1,321,600
Tamaulipas	Ciudad Victoria	2,303,000
Tlaxcala	Tlaxcala	675,000
Veracruz	Jalapa	6,812,600
Yucatan	Merida	1,331,600
Zacatecas	Zacatecas	1,258,200

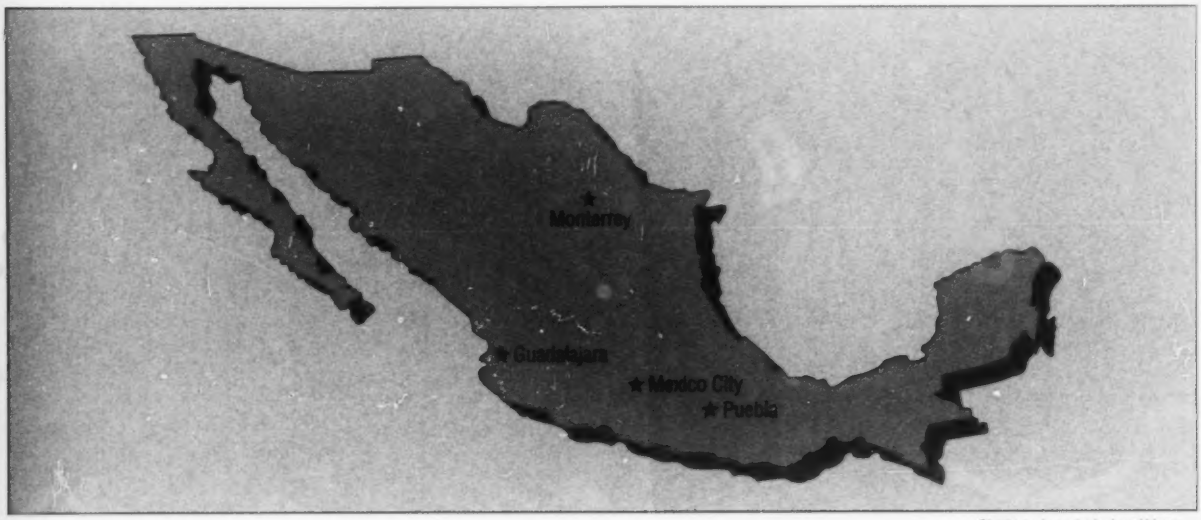
Principal Cities of Mexico

Some 30% of the population of Mexico lives in only three cities: Mexico City in the Federal District, Guadalajara, and Monterrey. Indeed, almost 23% of all Mexicans live in Mexico City, which, with 19,250,000 people, is far and away the largest city on earth. For the sake of comparison, Tokyo has a little over eight million, as does Bombay; New York has just over seven million.

City	Population
Mexico City, Federal District	19,255,000
Guadalajara, Jalisco	3,351,000
Monterrey, Nuevo Leon	3,051,000
Puebla, Puebla	1,885,000
Leon, Guanajuato	968,000
Torreon, Coahuila	779,000
Ciudad Juarez, Chihuahua	709,000
Merida, Yucatan	662,000
San Luis Potosi, San Luis Potosi	647,000
Tijuana, Baja California	641,000
Tampico, Tamaulipas	638,000

For comparison, here's the population of some major cities in the U.S.:

New York	7,071,639
Chicago	3,055,072
Los Angeles	2,966,793
Philadelphia	1,688,210
Dallas	904,078
San Francisco	678,974
St. Louis	453,085



Charts and graphs by Lisa Hilgers

Mexico and the World

In 1986, as part of an overall drive on the part of the Mexican government to reorient the economy toward the world market, Mexico became a signatory to the General Agreement on Tariffs and Trade (GATT), to which most of the world's primary importers and exporters are parties.

Mexico is also a member of the Latin American Integration Association (known by its Spanish initials as ALADI), along with Argentina, Brazil, Bolivia, Colombia, Chile, Ecuador, Paraguay, Peru, and Venezuela. The long-term objective of ALADI is to establish a Latin American common market.

As far as the U.S. is concerned, Mexico is already our third-largest trading partner (after Canada and Japan), with two-way trade reaching more than $50 billion.

In 1989, oil and petroleum products accounted for about 16% of total U.S. imports from Mexico, making Mexico our fourth-largest such supplier. Mexico was also the third-largest single market for U.S. agricultural exports, importing $2.8 billion of U.S. agricultural goods. At the same time, Mexico was the second-largest supplier of U.S. agricultural imports, exporting nearly $2.3 billion of agricultural goods to the U.S.

Imports to and exports from the United States in 1989 accounted for roughly two-thirds of Mexico's total trade with all countries. In terms of manufactures, the percentages are even higher. Although greatly reduced in 1989, Mexico's surplus in its trade with the United States—averaging almost 60% of its global trade surplus during 1985-88—has been indispensable in enabling Mexico to meet its debt-servicing obligations.

Mexico/U.S. Trade Totals

Year	Total trade ($ billion, U.S.)
1989	$52.2
1988	43.9
1987	34.8

Top 10 U.S. Exports to Mexico in 1989

	(Billion $)
1. Motor vehicle parts	2.0
2. Telecommunications equipment & parts	1.0
3. Electrical switchgear apparatus	0.9
4. Equipment for distributing electricity	0.9
5. Cathode-ray tubes (incl. TV tubes)	0.6
6. Measuring & checking instruments	0.5
7. Internal combustion engines	0.5
8. ADP parts	0.5
9. Base metal manufactures	0.5
10. Corn	0.5

Top 10 U.S. Imports from Mexico in 1989

	(Billion $)
1. Crude petroleum	4.0
2. Equipment for distributing electricity	1.5
3. Autos	1.2
4. Motor vehicle parts	1.1
5. Telecom. equip. & parts	1.0
6. Electrical switchgear apparatus	0.9
7. Television receivers	0.9
8. Internal combustion engines	0.8
9. Radio receivers	0.7
10. Fresh/frozen vegetables	0.7

The Mexican Economy

During the 1980s, the Mexican economy underwent a crisis of huge proportions. The combination of a collapse of the oil market, heavy indebtedness, and high international interest rates set off an almost lethal mixture of runaway inflation and a severe depression. Between 1982 and 1988, overall output stagnated while real per-capita income and wages fell by more than 40%. Annual inflation rates soared into the triple digits.

In 1988, Carlos Salinas de Gortari, a Harvard-trained economist who is now 42 years old, was elected president, to serve the single six-year term as prescribed by law. His goal was to reduce the size of the bureaucracy and the nation's dependence on oil, and to reach out toward freer trade by privatizing many state-owned entities and relaxing foreign-investment rules.

In December 1988 the Mexican government and the primary economic sectors made an agreement called the Pact for Economic Growth and Stability (PECE). While the details are complex, in essence the pact furthered the process of privatizing formerly public economic sectors, lowering (and in many cases simply removing) trade barriers, and reforming the taxation system. In addition, Salinas accomplished a stunning coup: he renegotiated Mexico's foreign indebtedness, which had amounted to a staggering $100 billion, reducing substantially its outflow of capital.

These measures seem to be working. Inflation fell from 52% in 1988 to 19.7% in 1989, and economic growth increased from 1.4% to 2.9%. But foreign investment in Mexico still lagged, to the disappointment of Salinas. Following a quick tour of Europe to gauge progress there, the Mexican president stepped up his own pace; he announced he would privatize commercial banks, then said Mexico was open to free trade.

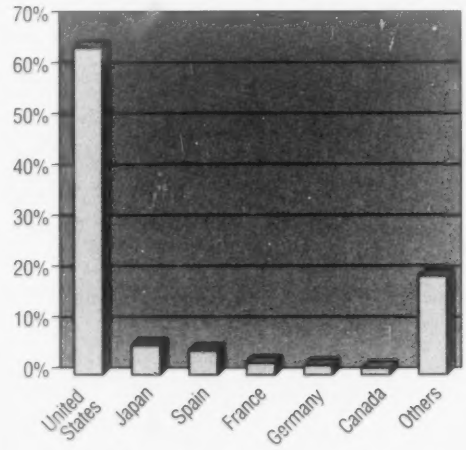
In December 1990 Salinas and Bush are to meet to begin the process of free trade agreements, similar to the pact with Canada that took effect in 1989.

The manufacturing sector, which includes printing and publishing, went through about the same trials during the 1980s as the rest of the economy.

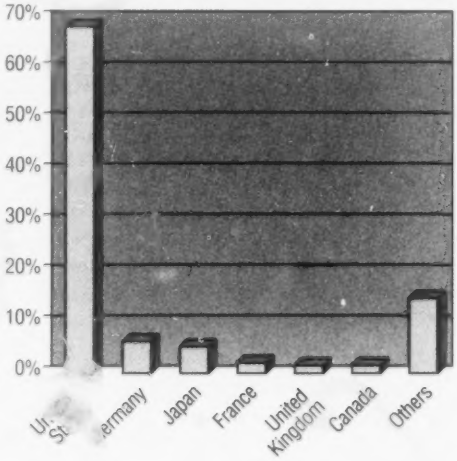
Manufacturing Production (1980 = 100)

Year	Value	Growth Rate	Exports ($ million, U.S.)
1980	100.0	7.8%	$3,382.9
1981	107.0	7.0%	3,427.3
1982	103.7	−3.1%	3,386.0
1983	95.9	−7.5%	4,582.7
1984	101.0	5.3%	5,594.8
1985	108.1	7.0%	4,978.0
1986	104.4	−3.4%	7,115.7
1987	108.5	3.9%	9,907.4
1988	111.0	2.3%	11,616.4

Exports by Principal Destinations



Permanent Imports by Principal Suppliers

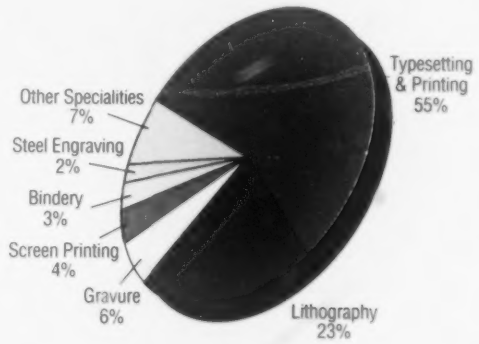


The Mexican Printing Industry

The Mexican printing and publishing industry comprises 6.5% of total local manufacturing companies, and accounts for 3% of total employment by industry; industry employment in Mexico is 120,000. Just as it is in the U.S. and Canada, the industry is somewhat more robust than its surroundings. During the period 1982-87, the paper, printing and publishing group—Great Division III, Division IV of the National Accounting System, of which printing and publishing is Item 32 (don't ask!)—grew 12.8% as compared to a growth rate for manufacturing as a whole of 3.5%.

There are 6,392 registered graphic arts firms in Mexico; they are primarily concentrated in Mexico City (53%) and in the states of Jalisco (9.4%) and Nuevo Leon (8.6%). That leaves 30% of the industry unaccounted for. In addition to the cities listed in this article, Mexico has around 50 rapidly growing urban areas, which account for most of the balance of at least the larger printing firms.

Composition of the Mexican Graphic Arts Industry



Largest Mexican Graphic Arts Firms

Screen Printing

Serigrafia Industrial y Comercial
Impresora y Serigrafica Hesketh
Publicidad Industrial Objetiva
Farias Process
Arte y Medios Publicitarios
Letraset de Mexico
Color Lite Mexicana
Procesadora de Plasticos Comerciales

Offset and Lithography

Prograsa
Formas para Negocios
Litografica Delta
Imprenta Madero
Lito Offset Atenas
Reproducciones Fotomecanicas
Galas de Mexico
Offset Multicolor
Lito Offset Latina
Impresora Simon
Artes Graficas Unidas

Binding

Ediciones Intercontinental
Encuadernacion Suari
Talleres Arte
Pupulibro
Encuadernaciones Finas

Publishing and Printing in Mexico

About 320 newspapers are published in Mexico, selling 10 million copies daily, 27% of them in Mexico City. Other states with significant newspaper activity are Coahuila, Chihuahua, Guanajuato, Jalisco, Mexico, Michoacan, Sinaloa, Tamaulipas, and Veracruz. Mexico has some 200 magazines with major circulation.

Approximately 900 firms are involved in the printing of newspapers, magazines, and other periodicals. Mexican exports of newspapers and other periodicals were $6.3 million (U.S.) in 1987, as opposed to $13.6 million in imports.

Book publishing is divided into textbooks and general readership (trade books). The government requires that textbooks be produced for some 25 million students; use of official textbooks is mandatory. About 60% of these textbooks are produced by the Mexican equivalent of the GPO, Talleres Graficos de le Nacion, the balance produced privately by contract.

Some 200 book-publishing companies issue around 10,000 titles per year (60% of them reprints). In 1986, some 80 million general readership books were printed. Since only 2% of the population buys books, the government is encouraging increased reading habits through weekly editions of low-priced books, opening libraries, and organizing periodic book fairs.

Finally, there are approximately 3,500 commercial printers, ranging from small shops to major enterprises. There are also 40 business forms printers, 290 packaging printers, and 600 companies in the various services industries.